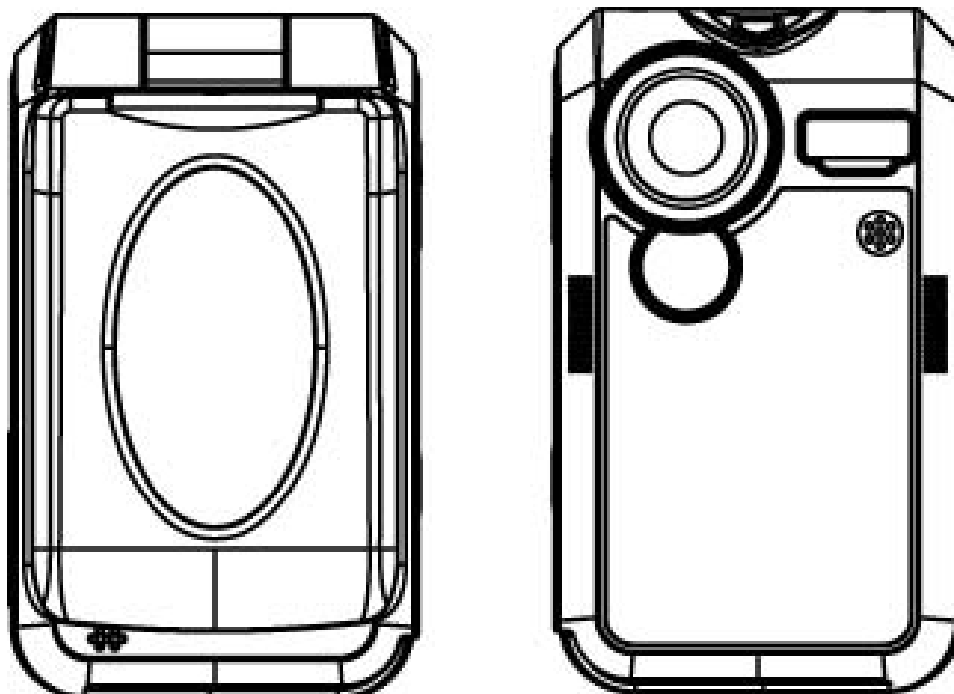


Digital Video Camera



User Manual

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Getting to Know Your Camera

◆ Overview

The camera with 3.2-Mega Pixel sensor can take DVD-Quality MPEG-4 movies. By way of using MPEG-4 technology, more videos can be taken within certain amount of memory. High quality images with up to 2976x2232 pixels can also be delivered smoothly. With a color LCD monitor, users can compose images and examine them easily.

Exposure and color balance can either be adjusted automatically or allowed to be changed manually. A 8x digital zoom increases user control over the movies and pictures you take. A MODE button can let you switch rapidly between taking movies, taking pictures and recording voice. The camera is also ideally suited for using as a PC camera hooked up to your home computer via high speed USB 2.0 port

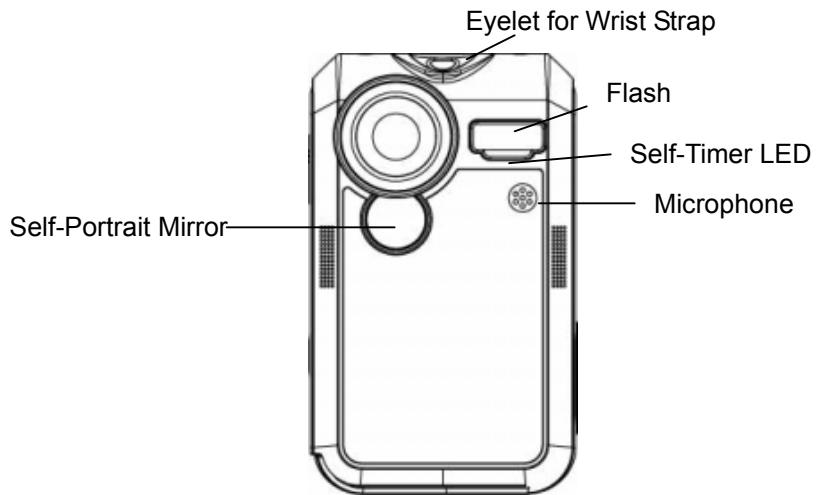
Pre-build 16 MB memory allows you to take pictures and movies without memory card. The memory card slot allows users to increase the storage capacity up to 512 MB.

◆ Standard Accessories

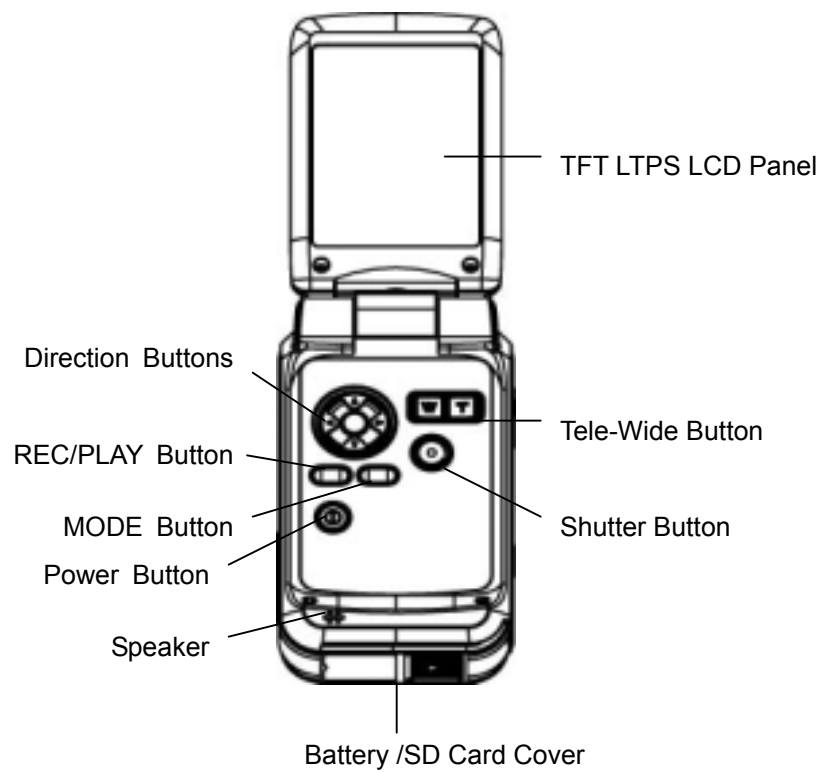
Unpack the package and make sure all standard accessories listed are included:

- Camera
- Power Adaptor
- USB Cable
- AV Cable
- NP60 Battery
- Quick Guide
- CD-ROM (Driver, Ulead Software and User Manual)
- Earphone
- Strap
- Pouch

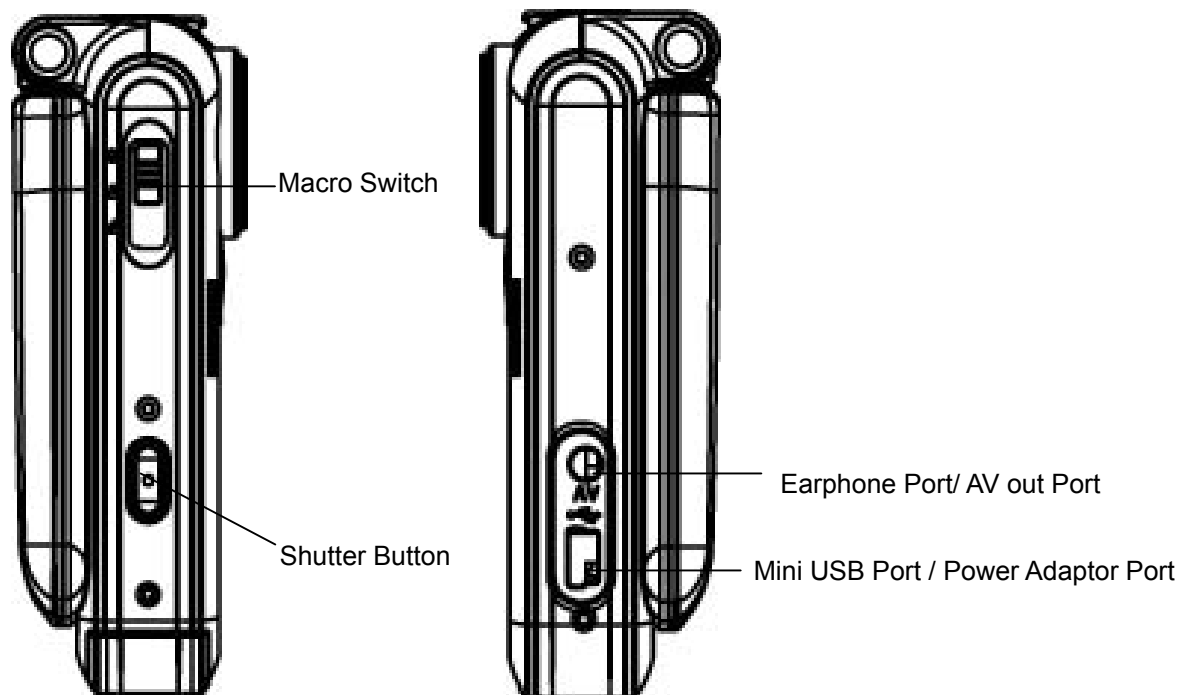
◆ **Front View**



◆ **KeyPad illustration**



◆ Side View



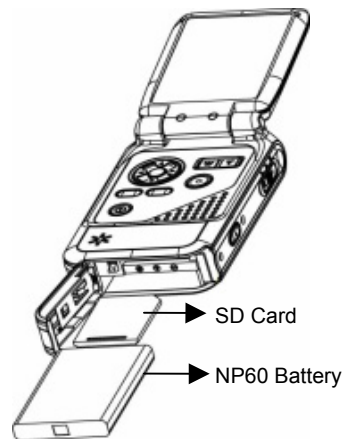
Section 2

Getting Up and Running

◆ Loading the Battery

Before using the camera, user must load NP60 rechargeable Li-ion battery.

1. Follow the arrow direction and slide to eject the battery / SD cover.
2. Face the battery up with letter side upward. Follow the battery injection direction according to the correct polarity marks. (+ or -) and plug the battery into camera
3. Closed the battery/SD Card Cover firmly.



Note: NP60 is the widely-used rechargeable Li-ion battery developed by Nokia for mobile phone.

◆ Charging Battery

Please fully charge Li-ion Battery via power adaptor for at least ten hours before using camera.

- (1) Plug power adaptor cable into USB port.
- (2) When charging battery, the self-timer LED light keeps blinking. LED light will keep on after battery charge complete.
- (3) It takes three hours to fully recharge the battery each time.

◆ Inserting and Removing an SD Card (Optional)

The camera comes with 16 MB pre-build memory which allows you to store pictures, movies, recorded voice and music. You can expand the memory capacity by using an optional SD or MMC memory card up to 512MB. To insert a memory card, refer to the figure above and:

1. Open the battery/SD card cover.
2. Insert the memory card until it locks into position.

To remove an installed SD card, press the card inwards to release it. When the card pops out, gently remove it from its slot.

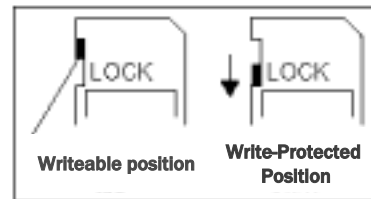


Note

When a memory card is fitted, movies and pictures are saved on card rather than on the built-in memory.

◆ Protecting Data on an SD Card

SD card is read-only by locking the SD card. No pictures, movies and voice can be recorded when the SD card is locked. Make sure the lock is on writeable position before recording any media.



◆ Turning the Camera On and Getting Started

To turn on the camera:

- (1) Flip out the LCD panel; the camera will turn on automatically.
- (2) Or press power button for one second to turn on it.

- ⇒ To take a movie, press the shutter button.
- ⇒ To take a picture, press the MODE button to switch to Picture Record Mode then press the shutter button to start taking pictures.
- ⇒ To record the voice, press the MODE button to switch to Voice Record Mode, and then press the shutter button to start the voice recording.
- ⇒ To view stored movies, pictures or listen to stored MP3 and voice recordings, press the REC/PLAY button once to switch to Playback Mode. Press a second time to return to Record Mode.

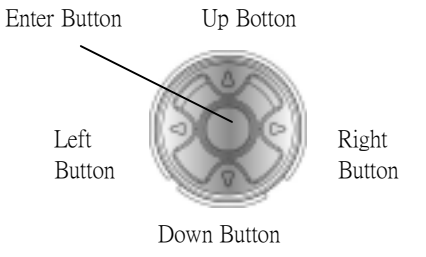






◆ Turning the Camera Off

To turn off the Camera, you can either press or hold the power button for one second, or you can place the panel back to its original position.

Section 3

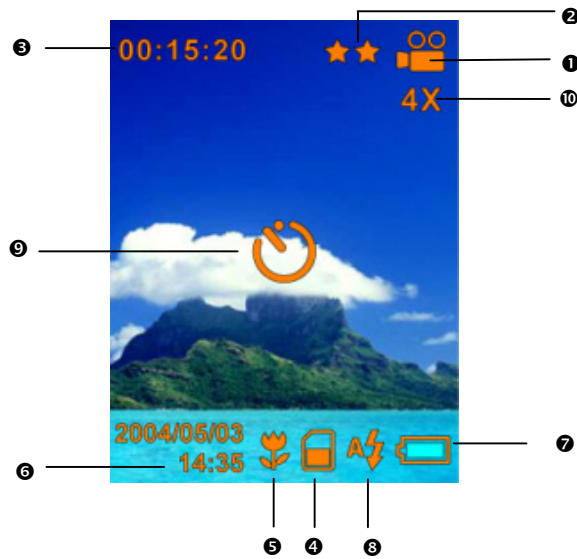
Record Mode

◆ Button Function

	<p>Right button : Flash AUTO/OFF</p> <p>Left button : Self-Timer ON/OFF</p> <p>Up button : Invalid</p> <p>Down button: LCD Information ON/OFF</p> <p>Enter button : Menu ON</p>
	<p>Power button: Press down for one second to turn on or turn off the camera.</p>
	<p>REC/PLAY button: Switch between Record Mode and Playback Mode.</p>
	<p>MODE button: Press the MODE button to switch between Movie, Picture, and Voice Record Mode.</p>
	<p>Tele-Wide button: Digital Zoom in and out.</p>
	<p>Shutter button: Start to take movie, picture, or record voice.</p>
	<p>Macro switch: Switch between Macro Mode, Portrait Mode, and Normal Mode.</p>


◆ LCD Monitor Information

The indicator shows below may display on LCD when movies and pictures are recorded :



(1)	Record Mode	
		Movie Record Mode
		Picture Record Mode
		Voice Record Mode
		Night Mode
		Multi-Snap Mode
		Two in One Mode
		AE Metering Mode
(2)	Resolution	
	Movie : ★★High / ★★Standard/ ★ Low	
	Picture: ★★High / ★★Standard/ ★ Low	
(3)	Number of images or recording time of movie that can still be taken at current resolution.	
(4)		SD card inserted
(5)		Macro Position Focusing
(6)	Date/Time : YYYY/MM/DD HH:MM	
(7)	Battery indicator : Full power / medium power / low power /	
	power exhausted	
(8)		Auto Flash
		Flash Off
(9)		Self-Timer Mode
(10)	8X digital zoom	

◆ MPEG4 Movie Recording

The camera is turned on with default mode of movie recording. You can start recording movie just by pressing shutter button . When a movie is recording, a time indicator will display on LCD monitor. To stop recording, press shutter button again.

To view stored movies, press the REC/PLAY button once to switch to Playback Mode.

Three movie resolutions are available.



Resolution	Quality
640*480(1.8Mbps) / 30 fps	High Quality★★★
640*480(1 Mbps) / 30 fps	Standard Quality★★
320*240 (500 Kbps) / 30 fps	Low Quality★

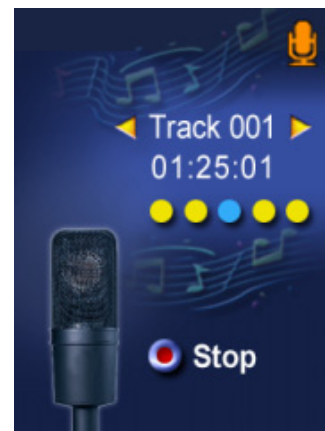
◆ Picture Recording

Press MODE button to switch to Picture Record Mode. Three resolution settings are available.



Resolution	Image Quality
2976*2232 (6.6 M pixel)	High Quality ★★★
2048*1536 (3.2 M pixel)	Standard Quality★★
1024*768 (800 K pixel)	Low Quality★

◆ Voice Recording





1. Press MODE button to switch to Voice Record Mode.
2. Press shutter button() to record voice.
3. Press shutter button() again to stop.



◆ Taking Close up Pictures


The camera has two close-up picture modes to allow you to take pictures at close range. The Macro Mode () should be used for object located at about 20 c.m., while the Portrait Mode () should be used for object located from 60 c.m. to 100 c.m..

To take close-up pictures:

1. Press MODE button to switch to Picture Record Mode.
2. Shift the macro switch to Macro () or Portrait () positions. In Macro Mode, the macro icon () will appear on the LCD monitor.
3. Press the shutter button () to take the picture.



Note

Remember to turn the macro switch back to Normal () when you are not taking close-up pictures.

◆ Using Digital Zoom

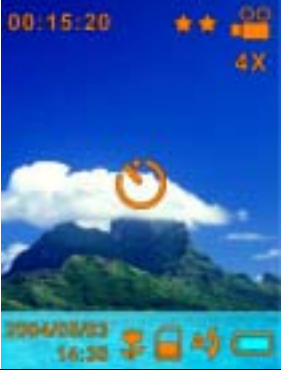


The digital zoom magnifies images up to eight times when recording movies or taking pictures.


1. To zoom in/out, press the Tele/Wide button.
2. The digital zoom can be set from 1x to 8x and the magnification ratio is shown on the LCD monitor.

◆ Options for Record Mode

Movie Record Mode	Picture Record Mode
<ol style="list-style-type: none"> 1. Resolution 2. Effect 3. White Balance 4. Exposure 5. Sharpness 6. Motion Stabilization 7. Setting 	<ol style="list-style-type: none"> 1. Flash 2. Self-Timer 3. Multi-Snap 4. Night Mode 5. AE Metering 6. Two in One 7. Resolution 8. Effect 9. White Balance 10. Exposure 11. Sharpness 12. Date Printing 13. Setting

◆ Operations for Record Mode

Operation	Screen
<ol style="list-style-type: none"> 1. Press Enter button when in Movie/Picture Record Mode. 	
<ol style="list-style-type: none"> 2. There are total six options in Movie Record Mode and twelve options in Picture Record Mode. 3. Use the Up/Down buttons to move between main menu options. 	<p style="text-align: center;">  Enter Button </p> 

Operation	Screen
4. Press Enter/Right buttons to enter submenu of main option you select. 5. Press Left button to exit main menu.	

◆ Default Setting and Validation

The following table indicates the camera's default setting as well as its validation.

1. Always: The setting always keeps valid.
2. One Time: The setting is only valid either once or till camera power off.

	Validation	Default Factory Setting
Resolution	Always	High for Movie Standard for Picture
Effect	One Time	Normal
White Balance	One Time	Auto
Exposure	One Time	Level 5
Sharpness	One Time	Level 5
Flash	Always	Off
Self-Timer	One Time	Off
Multi-Snap	One Time	Off
Night Mode	One Time	Off
AE Metering	One Time	Center
Two in One	One Time	Off
Sound	Always	On
Format Card	One Time	Off
TV System	Always	Depends on shipping area
Language	Always	Depends on Shipping area
Volume	Always	Level 6
Motion Stabilization	Always	Off
Date Printing	Always	Off

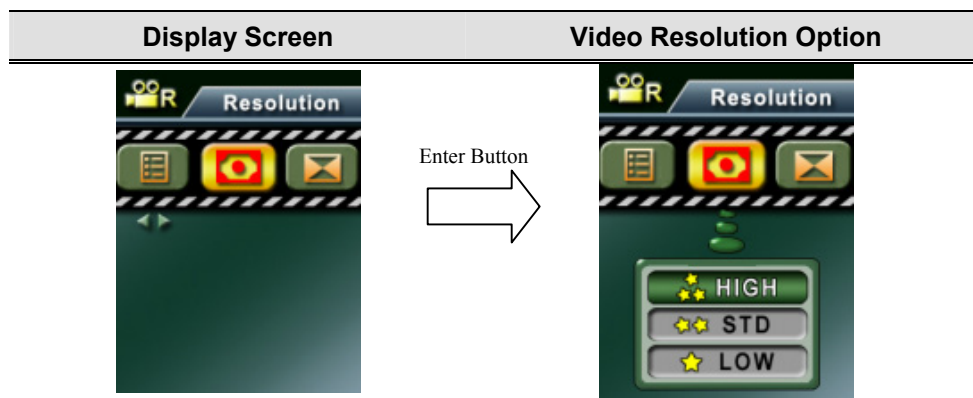
◆ Record Submenu Setting

Record submenu includes camera setting and other advanced setting. You can use Up/Down buttons to move between options and press Enter button to validate the setting.

◆ Movie Resolution

To change Movie Resolution:

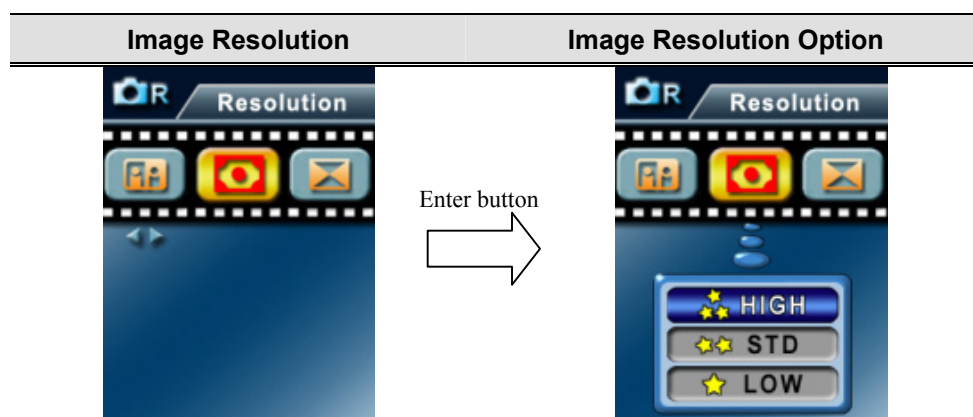
1. In Movie Record Mode, press Enter button to switch to Movie menu screen.
2. Use Up/Down buttons to select Resolution, then press Enter/Right buttons to switch to Resolution submenu.
3. Use Up/Down buttons to move between three settings.
4. Press Enter button to validate the setting and exit.



◆ Picture Resolution

To change Picture Resolution

1. In Picture Record Mode, press Enter button to switch to Picture menu screen.
2. Use Up/Down buttons to select Resolution, then press Enter/Right buttons to switch to Resolution submenu.
3. Use Up/Down buttons to move between three settings.
4. Press Enter button to validate the setting and exit.

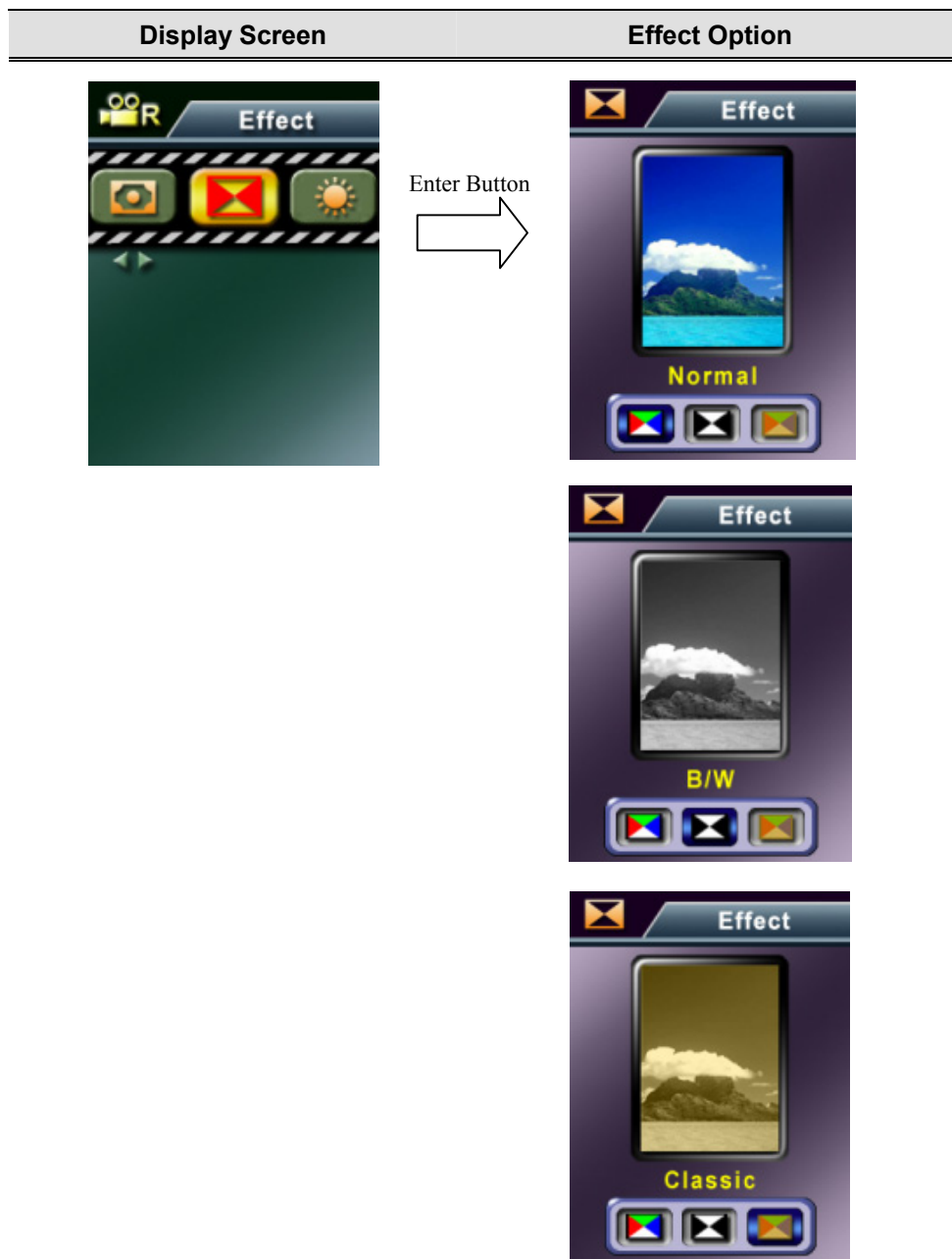


◆ Effect

There are three modes which are Normal, Black/White and Classic.

To change Effect setting:

1. In Movie/Picture Record Mode, press Enter button to switch to menu screen.
2. Use Up/Down buttons to select Effect then press Enter/Right buttons to switch to Effect submenu.
3. Use Up/Down buttons to move between three settings. The change can be previewed immediately.
4. Press Enter button to validate the setting and exit.



◆ White Balance

The camera adjusts the color balance of images automatically. Three manual white balance settings are available:

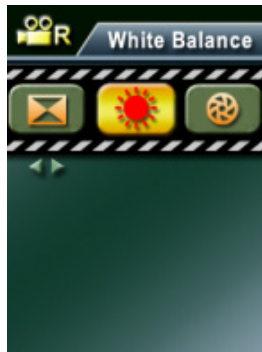
- Auto (Default) : The camera automatically adjusts white balance.
- Daylight: Under outdoors
- Fluorescent: Under fluorescent light condition.
- Tungsten: Under tungsten light condition.

To change White Balance Setting:

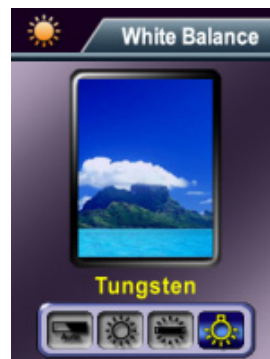
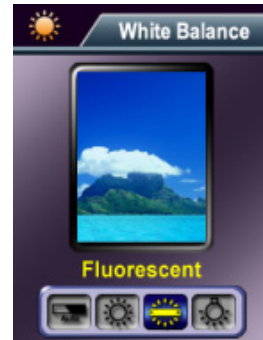
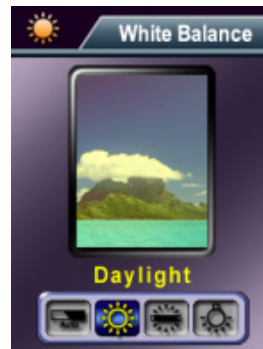
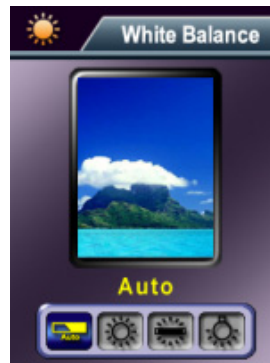
1. In Movie/Picture Record Mode, press Enter button to switch to menu screen.
2. Use Up/Down buttons to select White Balance, then press Enter/Right buttons to switch to White Balance submenu.
3. Use Up/Down buttons to move between four settings. The change can be previewed immediately.
4. Press Enter button to validate the setting and exit.

Display Screen

W/B Option



Enter Button
→

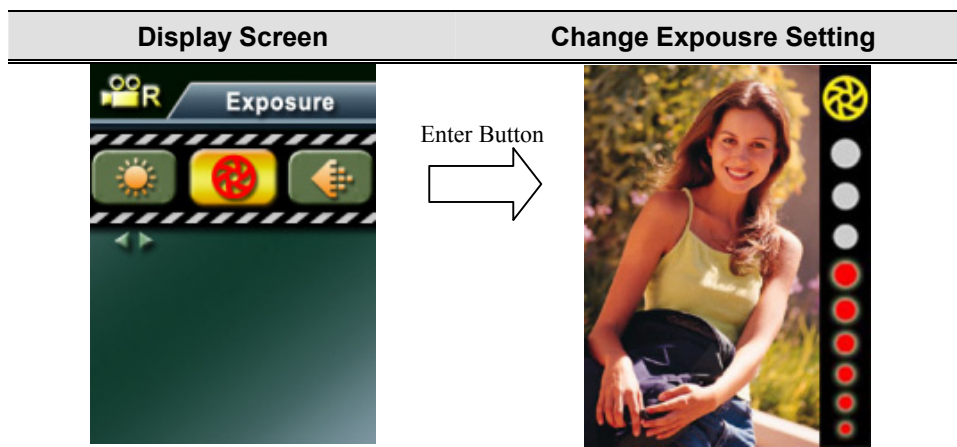


◆ Exposure

The camera adjusts image exposure automatically. In certain circumstances you may wish to adjust the exposure compensation setting.

To change Exposure setting:

1. In Movie/Picture Record Mode, press Enter button to switch to menu screen.
2. Use Up/Down buttons to select Exposure, then press Enter/Right buttons to switch to Exposure submenu.
3. Use Up/Down buttons to move between nine levels. The change can be previewed immediately.
4. Press Enter button to validate the setting and exit.

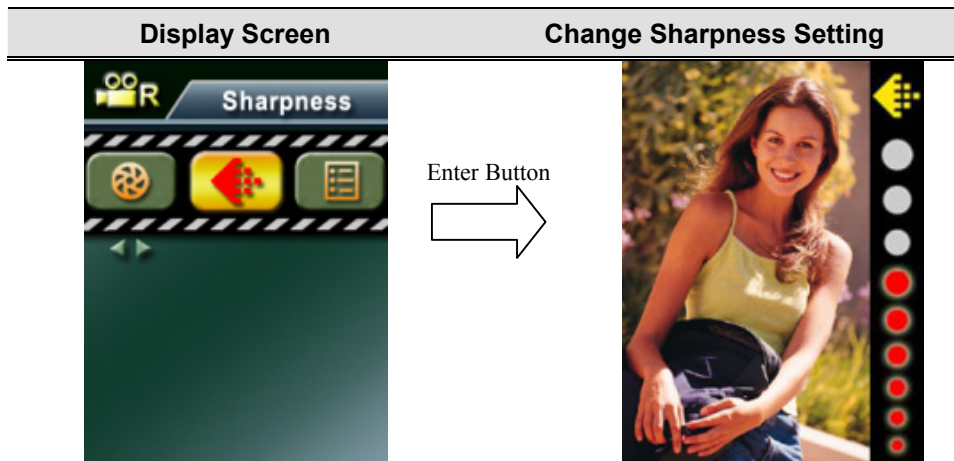


◆ Sharpness

You can soften and sharpen images to achieve different effects.

To change Sharpness setting:

1. In Movie/Picture Record Mode, press Enter button to switch menu screen.
2. Use Up/Down buttons to select Sharpness then press Enter/Right buttons to switch to Sharpness submenu.
3. Use Up/Down buttons to move between nine levels. The change can be previewed immediately.
4. Press Enter button to validate the setting and exit.

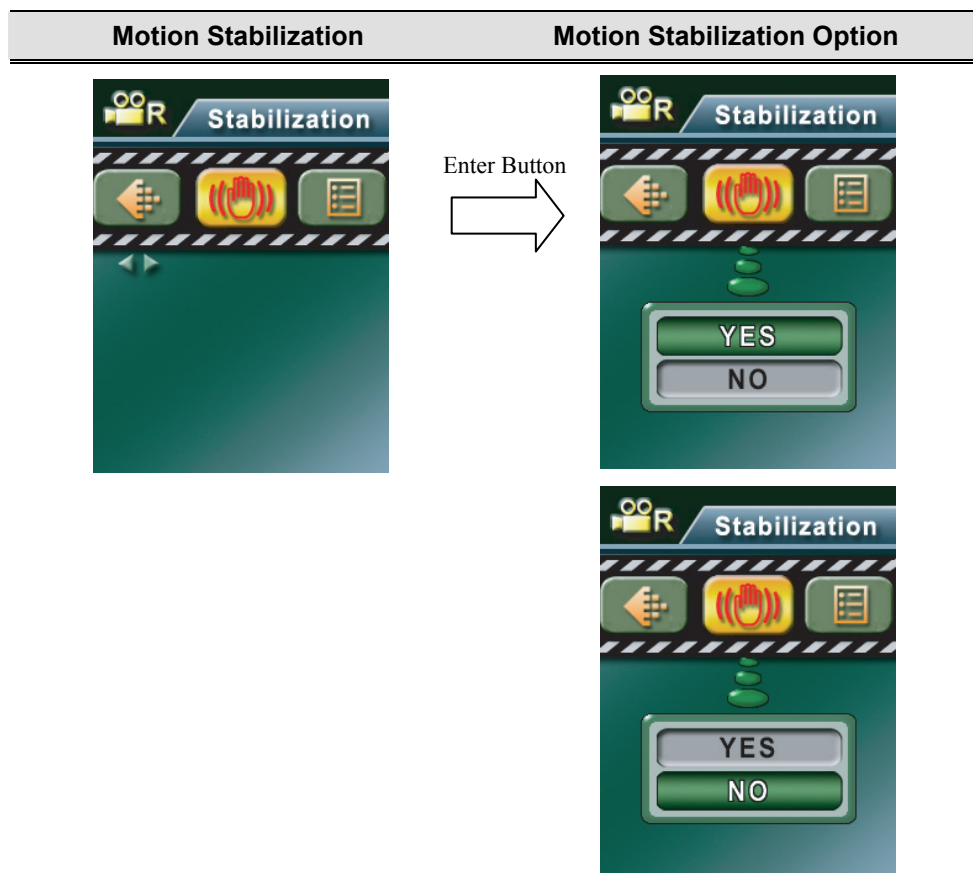


◆ Motion Stabilization

The feature of Motion Stabilization can reduce the recorded image blur caused by camera shake.

To enable Motion Stabilization:

1. In Movie Record Mode, press Enter button to switch to Movie menu screen.
2. Use Up/Down buttons to select Motion Stabilization then press Enter/Right buttons to switch to Motion Stabilization submenu.
3. Use Up/Down buttons to Select Yes.
4. Press Enter button to validate the setting and exit.



Note

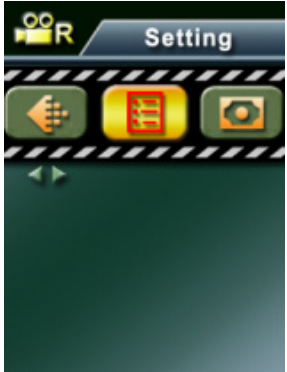
The captured picture will be smaller when motion stabilization is enabled.

◆ Setting

The Setting submenu contains seven options for configuring your camera set up.

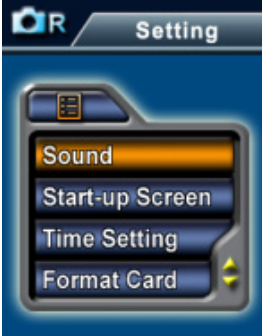
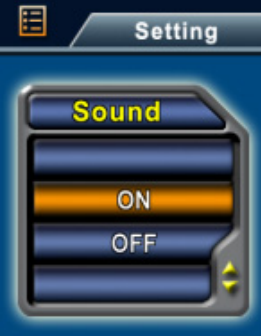
To change advanced setting:

1. In Movie/Picture Record Mode, press Enter button to switch to menu screen.
2. Use Up/Down buttons to select Setting then press Enter/Right buttons to switch to Setting submenu.
3. Use Up/Down buttons to move between seven settings.

Display Screen	Setting Option
	<p>Seven options:</p> <ol style="list-style-type: none"> 1. Sound (operation sound) 2. Start-Up Screen 3. Time Setting 4. Format Card 5. TV System 6. Language 7. Default Setting

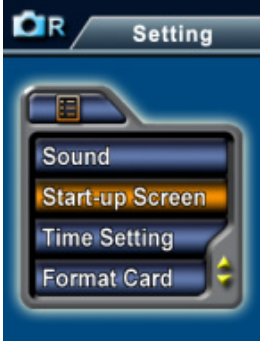
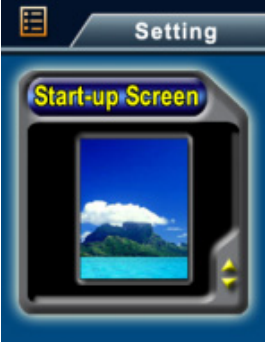
● Sound Setting

Enable or disable Keypad tone and operation sound by using Up/Down buttons, then press the Enter button to validate the setting.

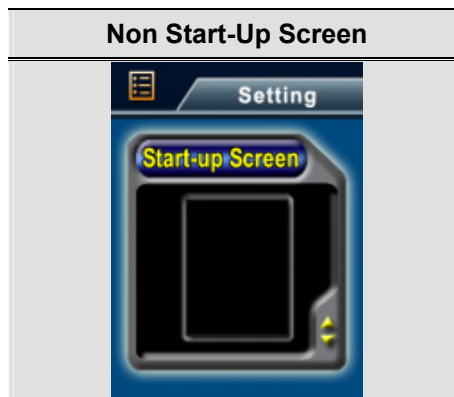
Submenu	Display Screen	Sound Setting
<p>Sound</p>		

Start-up Screen

Customize the Start-Up Screen with your favorite pictures. Press Up/Down buttons to select the picture you want and press Enter button to validate the setting and exit.

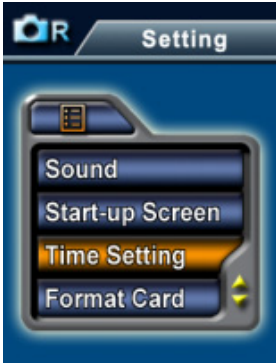
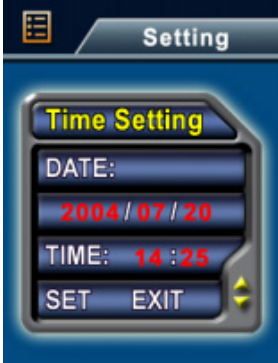
Submenu	Display Screen	Start-Up Screen
Start-Up Screen		

If you do not want to customize the start up screen, press Up/Down buttons and select Non Start-Up Screen.

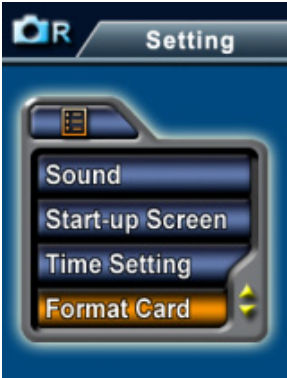
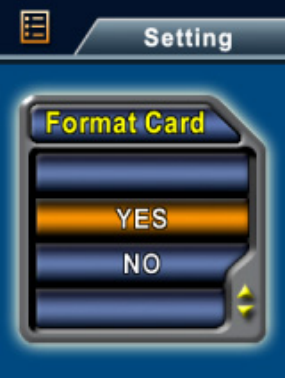


Time Setting

- Move between Date, Time and Exit by using Left/Right buttons.
- Adjust date and time by using Up/Down buttons, then select SET to validate each change.
- Select EXIT to leave Time Setting without any change.

Submenu	Display Screen	Time Setting
Time Setting		

④ **Format Card**

Submenu	Display Screen	Format Card Options
Format Card		

Yes : Format the SD Card / built-in memory

No (Default) : Do not format SD Card / built in memory



⑤ **TV System**

Ensure that the appropriate TV standard of your area is selected – either NTSC or PAL.


Wrong TV system setting may cause image flicker.

NTSC standard: USA, Canada, Japan, South Korea and Taiwan etc.

PAL standard: UK, Europe, China, Australia, Singapore and Hong Kong etc.

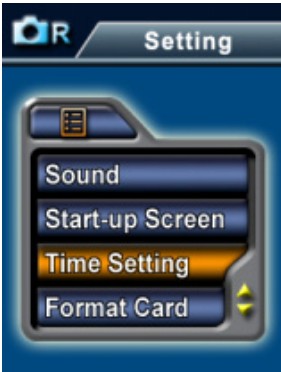
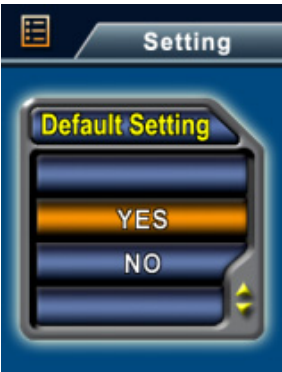
Submenu	Display Screen	TV System Option
TV System		

⑥ Selecting Interface Language

Submenu	Display Screen	Language Option
Language		<ul style="list-style-type: none"> • Europe Version English, Germany, French, Italian, Spanish and Portuguese • Pan-Asian Version English, Korean, Japanese, Traditional Chinese, Simplified Chinese



⑦ Default Setting

To restore the default factory setting, select this option.

Submenu	Display Screen	Default Setting Options
Default Setting		

◆ Flash (Picture Record Mode Only)

This camera has two flash settings. To change flash setting by either hot key (Right button) or Option Setting.

- **Auto-flash**(): the flash fires automatically according to light conditions. Use this mode for general photography.
- **Flash Off**(): the flash will not fire under any circumstances. Use this mode when taking images in a place where flash photography is prohibited, or when the subject is distant (beyond the range of the flash).

To change Flash setting:

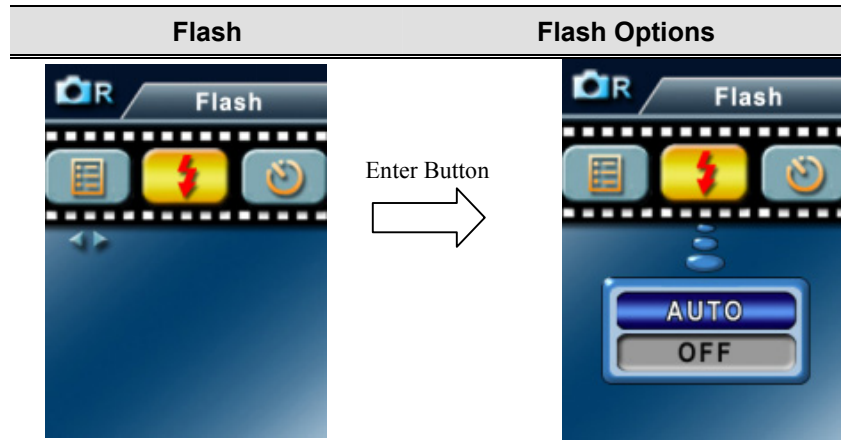
1. In Picture Record Mode, press Enter button to switch to menu screen.
2. Use Up/Down buttons to select Flash, then press Enter/Right buttons to switch to Flash submenu.
3. Use Up/Down buttons to move between two settings.

4. Press Enter button to validate the setting and exit.



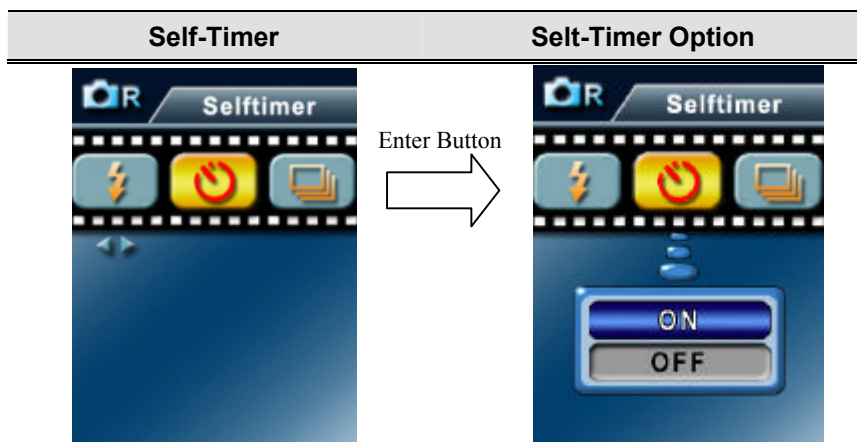
Note

- The flash will be disabled automatically when battery power is low (🔋)



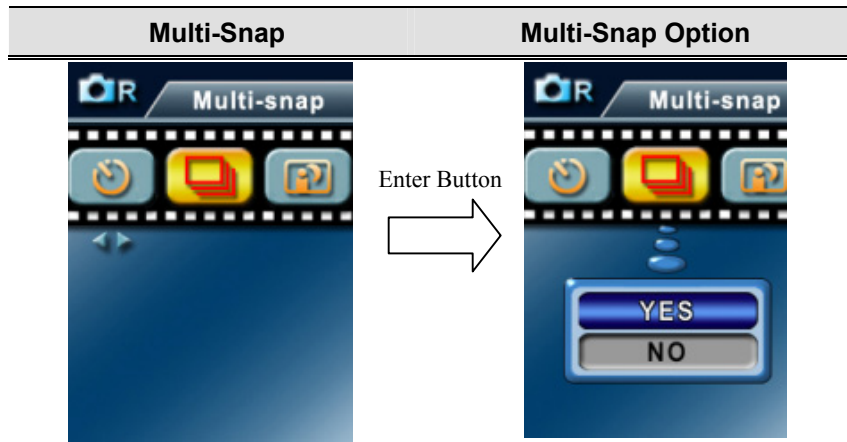
◆ Self-Timer (Picture Record Mode Only)

The self-timer allows you to take pictures with a ten-second time delay. To activate Self-Timer by either hot key(Left button) or Option Setting. The self-timer LED on the front of the camera beneath the flash light will also blink. The speed of blinking will increase just before the picture is taken.



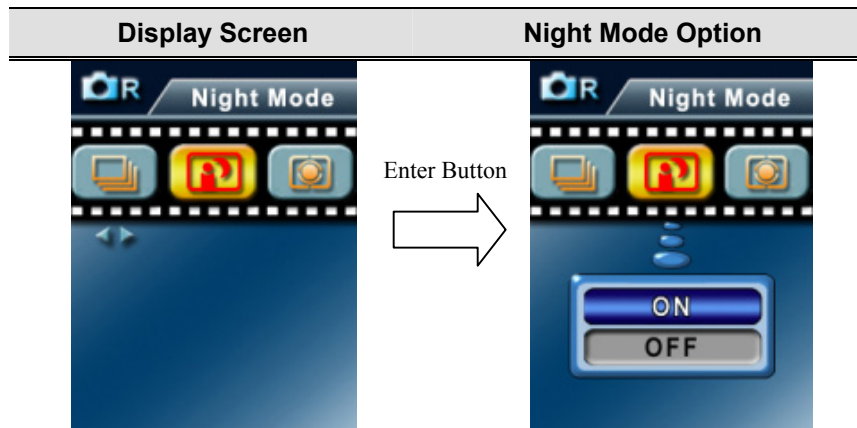
◆ Multi-Snap (Picture Record Mode Only)

With the camera set to Multi-Snap Mode, you can take five contiguous pictures.



◆ Night Mode (Picture Record Mode Only)

Use Night Mode for night scenes or low light conditions. A longer exposure captures more detail of background subjects.



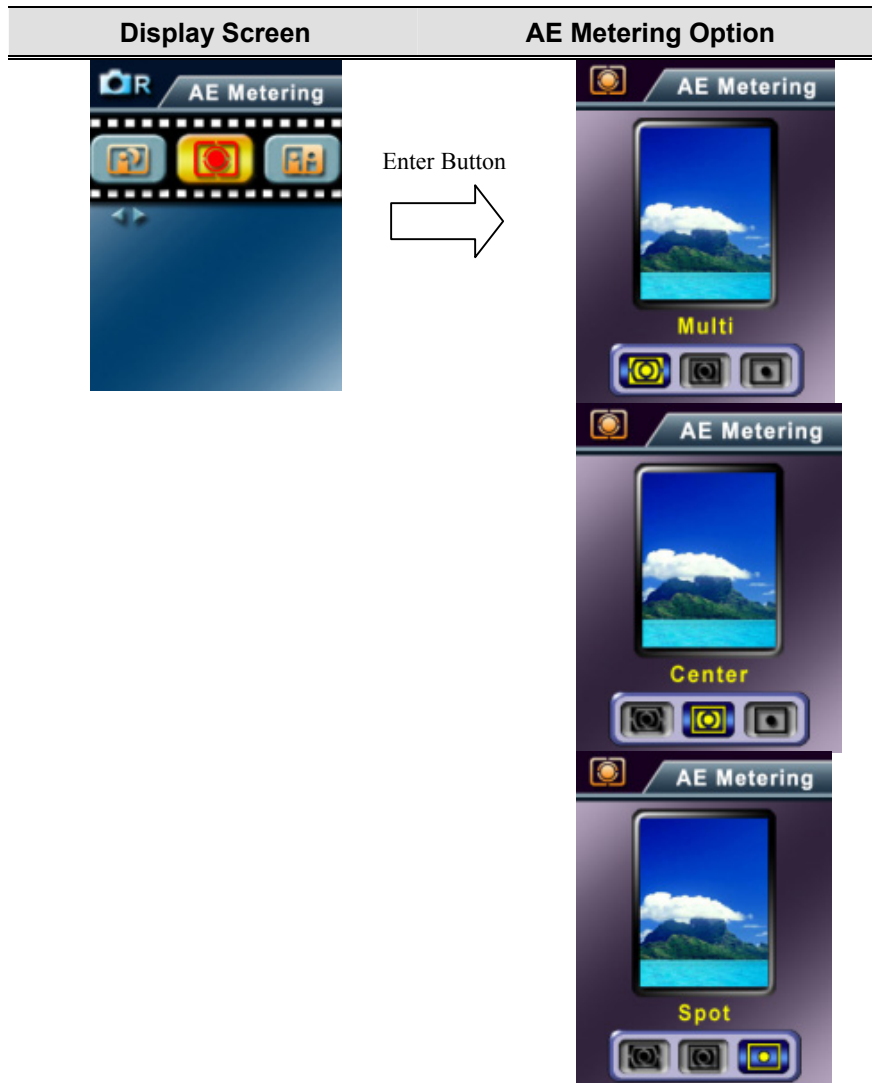
Note

To avoid blurry pictures, place the camera on a flat, steady surface, or use a tripod.

◆ AE Metering (Picture Record Mode Only)

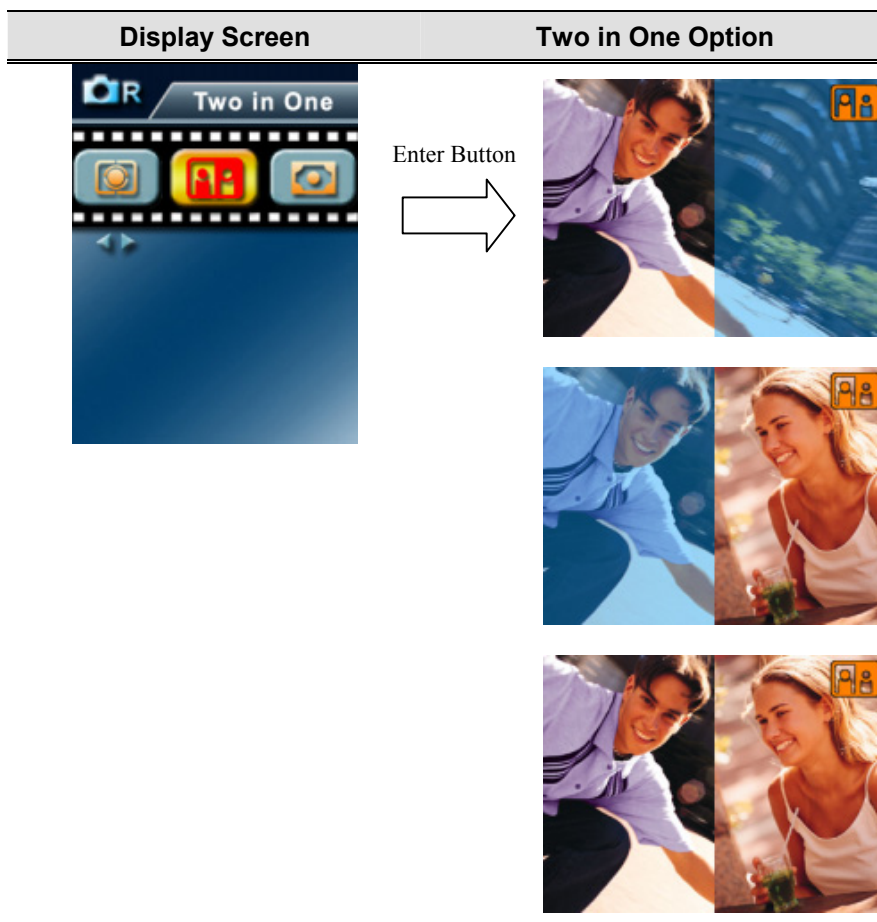
There are three settings which are Multi segment, Center-weighted, Spot AE Metering.

- Multi-segment: The exposure is determined by the entire screen.
- Center-Weighted: The exposure is determined mainly by the center of the screen.
- Spot: The exposure is determined by the small area in the center of the screen.



◆ **Two in One (Picture Record Mode Only)**

With camera set to Two in One mode, you can combine two snapshots into one picture.

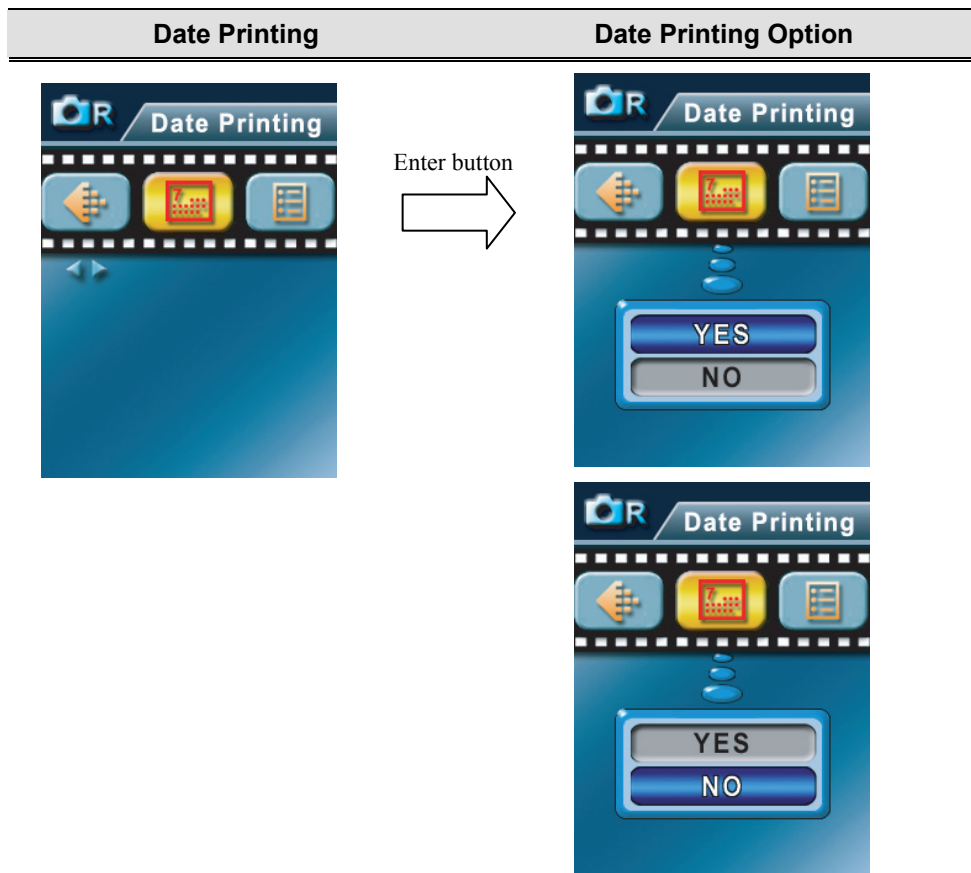


◆ Date Printing (Picture Record Mode Only)

The feature of Date Printing can set the camera to automatically put the date on the pictures.

To enable Date Printing

1. In Picture Record Mode, press Enter button to switch to Picture menu screen.
2. Use Up/Down buttons to select Resolution, then press Enter/Right buttons to switch to Date Printing submenu.
3. Use Up/Down buttons to Select Yes.
4. Press Enter button to validate the setting and exit.



Note

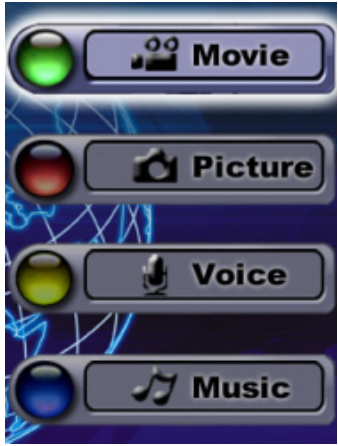
Please be advised that portrait images could not be viewed correctly on a TV as the default image output to TV is Landscape Mode.

Section 4

Playback Mode

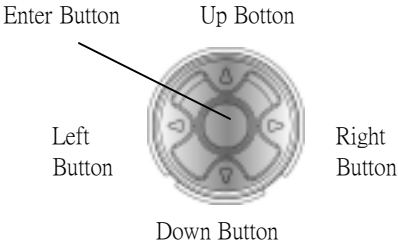



Press REC/PLAY button to switch from Record Mode to Playback Mode.

The Playback Mode is for viewing and managing movies and pictures as well as listening to voice and music on the built-in memory or on an optional memory card.

Operation	Display Screen
<p>Press REC/PLAY button to switch from Record Mode to Playback Mode Main Menu.</p> <ul style="list-style-type: none"> • There are four options in the Playback Mode, movie, picture, voice, and music. • A folder icon will be shown if there is any movie, picture, voice, or MP3 file stored. • Up/Down or Mode button can be used to select the specific option. <p>Press Enter button to view movies/pictures or listen to voice/music.</p>	

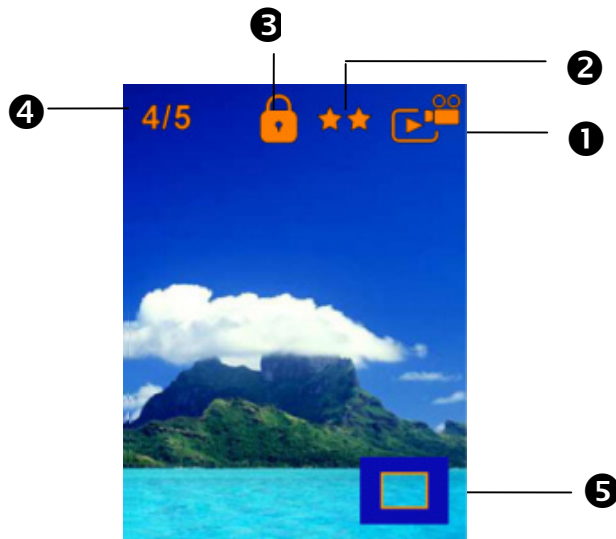
◆ Button Functions
















The direction buttons have the following functions in Movie and Picture Playback Modes.

	<p>Right button : Go to the next movie/ picture.</p> <p>Left button : Go to the last movie/ picture.</p> <p>Up button : Invalid</p> <p>Down button : Information ON/OFF</p> <p>Enter button : Enter to movie, picture, voice, or music option menu.</p>
 <p>REC/PLAY</p>	<p>REC/PALY button: Switch to movie/ picture Record Mode.</p>
 <p>MODE</p>	<p>Mode button: Go back to playback main menu.</p>
	<p>Tele-Wide button: Digital Zoom in and out.</p>

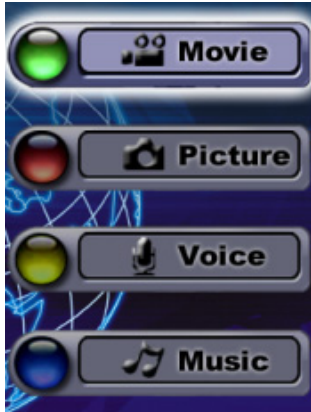
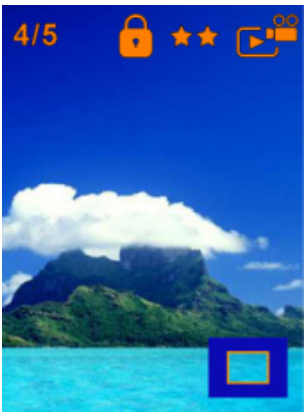

◆ LCD Monitor Information

Indicators on the LCD screen while in Playback Mode :






(1)	Mode Indicator
	 Movie Playback Mode
	 Picture Playback Mode
	 Voice Playback Mode
	 Music Playback Mode
(2)	Resolution Indicator
	Movie :  High /  Standard /  Low
	Picture:  High /  Standard /  Low
(3)	 Indicate the selected movie/picture is locked.
	 Indicate the single movie/voice/MP3 is being repeated.
	 Indicate all of the movies/voices/MP3s are being repeated.
	 Indicate the slide show is playing.
(4)	Current Number/ Total number of movie, picture, voice, or music.
(5)	 Magnification Indicator.


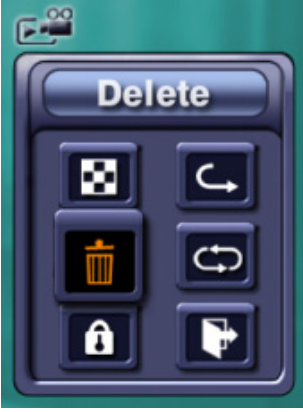
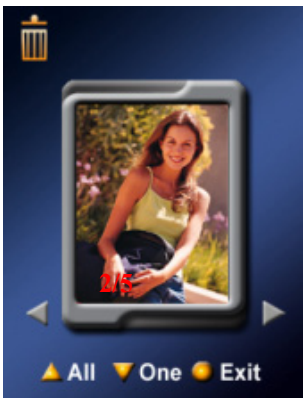
◆ **Movie Playback**

Operation	Display Screen
<p>1. Use Up/Down buttons to select the Movie option. 2. Press Enter button to go to Movie Playback Mode.</p>	 <p>The screenshot shows a vertical menu with four options: 'Movie' (with a film strip icon), 'Picture' (with a camera icon), 'Voice' (with a microphone icon), and 'Music' (with a musical note icon). Each option has a colored circular indicator to its left: green for Movie, red for Picture, yellow for Voice, and blue for Music.</p>
<p>3. Use Right/Left buttons to go to the next or last movie. 4. Press Shutter button to play and press it again to pause.</p>	 <p>The screenshot shows a movie playback screen. At the top left, it displays '4/5'. To the right are icons for a lock, two stars, and a play button. The main area shows a landscape with a blue sky, white clouds, and green mountains over a blue body of water. A small blue square with a white border is visible in the bottom right corner of the image.</p>
<p>5. Press Enter button to go to the movie option menu. 6. Use direction buttons to select six options, Thumbnail, Delete, Lock, Repeat One, Repeat All, or Exit.</p>	 <p>The screenshot shows a menu titled 'Thumbnail' with a film strip icon at the top left. Below the title are six buttons arranged in a 2x3 grid: a checkered box icon, a right-pointing arrow, a trash can icon, a circular arrow icon, a lock icon, and a left-pointing arrow icon.</p>

◆ **Thumbnail Function**

Operation	Display Screen
<p>1. Use direction buttons to select the Thumbnail option ().</p>	
<p>2. Press Enter button to view nine thumbnail movies. 3. To play a movie, use direction buttons to select the movie and press Enter button to view.</p>	

◆ Delete Movies

Operation	Display Screen
1. Use direction buttons to select the Delete option ().	 The image shows a 'Delete' menu screen. At the top, there is a 'Delete' button. Below it are several icons: a checkered flag, a right arrow, a trash can, a left arrow, a padlock, and a right arrow.
2. Press Enter button to go to the Delete menu. 3. Use Right/Left buttons to select the movie. 4. Use Up button to delete all movies and Down button to delete single movie. 5. Before a movie is deleted, a confirmation screen will appear; choosing "Yes" will execute the operation, "No" will cancel the operation. 6. Press Enter button to exit.	 The image shows a confirmation screen for deleting a movie. It features a central movie poster of a woman sitting outdoors. Above the poster is a trash can icon. Below the poster are navigation arrows and three options: 'All' (up arrow), 'One' (down arrow), and 'Exit' (circle).



Note

If a memory card is fitted, you can delete only those movies stored on the card.



Note

Movies on a written-protected memory card cannot be deleted.


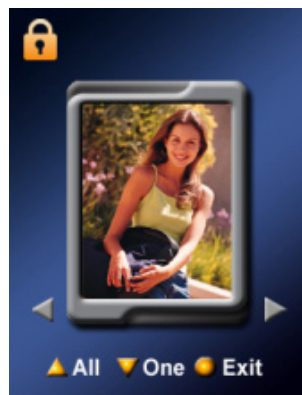


Note

The delete function will only erase unlocked movies. Locked movies must be unlocked before being deleted.

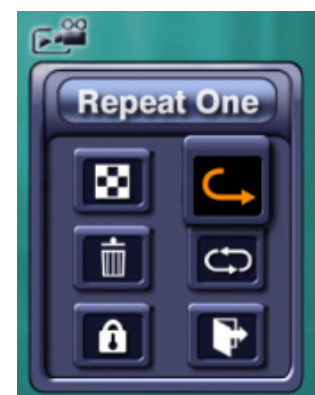
◆ Lock Movies

Single or all movies can be locked. This function can prevent the movies from being deleted accidentally.

Operation	Display Screen
<ol style="list-style-type: none"> 1. Use direction buttons to select the Lock option (🔒). 2. Press Enter button to go to the Lock menu. 	
<ol style="list-style-type: none"> 3. Use Right/Left buttons to select the movie. 4. Use Up button to lock/unlock all movies and Down button to lock/unlock single movie. 5. Before a movie is locked/unlocked, a confirmation screen will appear; choosing "Yes" will execute the operation, "No" will cancel the operation. 6. Press Enter button to exit. 	

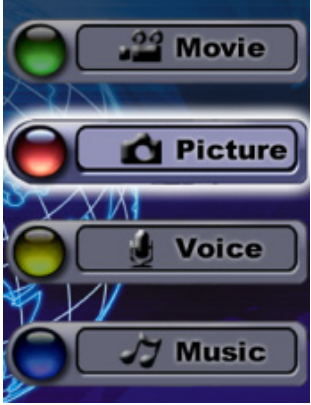
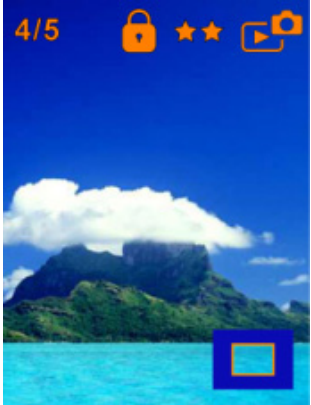

◆ Repeat Movies

This function automatically repeats playing single movie or all movies in order.




Operation	Display Screen
<ol style="list-style-type: none"> 1. Use direction buttons to select the Repeat One option (↶) or Repeat All option (↷). 2. Press Enter button to start repeating. 	



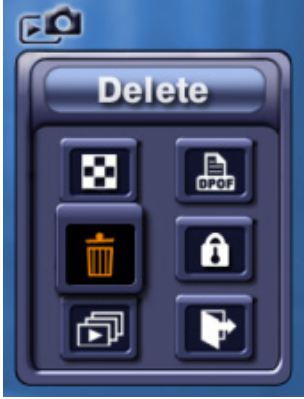
◆ Picture Playback

Operation	Display Screen
<ol style="list-style-type: none"> 1. Use Up/Down buttons to select the Picture option. 2. Press Enter button to go to Picture Playback Mode. 	 <p>A screenshot of the main menu interface. It features four large, rounded buttons stacked vertically. From top to bottom, they are labeled 'Movie' (with a person icon), 'Picture' (with a camera icon), 'Voice' (with a microphone icon), and 'Music' (with a musical note icon). The 'Picture' button is highlighted with a red glow, indicating it is the selected option.</p>
<ol style="list-style-type: none"> 3. Use Right/Left buttons to go to the next or last picture. 4. While the picture is selected, use Tele/Wide buttons to magnify. 5. Use direction buttons to navigate the magnified picture. 	 <p>A screenshot showing a landscape photograph of a mountain range under a blue sky with white clouds. In the top left corner, it displays '4/5'. In the top right corner, there are icons for a lock, two stars, and a zoom-in symbol. A blue square with a white border is overlaid on the bottom right corner of the image, representing the magnified area.</p>
<ol style="list-style-type: none"> 6. Press Enter button to go to the picture option menu. 7. Use direction buttons to select six options, Thumbnail, Delete, Slide, DPOF, Lock, or Exit. 	 <p>A screenshot of the 'Thumbnail' menu. The title 'Thumbnail' is at the top. Below it are six buttons arranged in a 3x2 grid. The buttons contain icons for: a grid of squares (Thumbnail), a document with 'DPOF' text (DPOF), a trash can (Delete), a padlock (Lock), a stack of images (Slide), and a right-pointing arrow (Exit).</p>

◆ **Thumbnail Function**

Operation	Display Screen
<p>1. Use direction buttons to select the Thumbnail option ().</p>	 <p>The image shows a camera's menu screen with a blue background. At the top left is a camera icon. The word "Thumbnail" is displayed in a white box. Below it are six buttons: a thumbnail icon (highlighted in orange), a "DPOF" button, a trash can icon, a lock icon, a folder icon, and a right-pointing arrow icon.</p>
<p>2. While selecting Thumbnail option, press Enter button to view nine thumbnail pictures.</p> <p>3. To view a picture, use direction buttons to select the picture.</p> <p>4. Press Enter button to view the selected picture.</p>	 <p>The image shows a 3x3 grid of nine thumbnail pictures, each with a small orange number in the bottom right corner. The thumbnails are: 1. Purple flowers, 2. A group of people, 3. A green leaf, 4. Orange fish, 5. A blue sky with clouds, 6. A stone structure, 7. A mountain landscape, 8. A dog, 9. Two women talking.</p>

◆ Delete Picture

Operation	Display Screen
1. Use direction buttons to select the Delete option ().	
2. Press Enter button to go to the Delete menu. 3. Use Right/Left buttons to select the picture. 4. Use Up button to delete all pictures and Down button to delete single picture. 5. Before a picture is deleted, a confirmation screen will appear; choosing “Yes” will execute the operation, “No” will cancel the operation. 6. Press Enter button to exit.	



Note

If a memory card is fitted, you can delete only those pictures stored on the card.



Note

Pictures on a written-protected memory card cannot be deleted.




Note

The delete function will only erase unlocked pictures. Locked pictures must be unlocked before being deleted.


◆ Make Slide Show

This function automatically repeats all pictures in order.

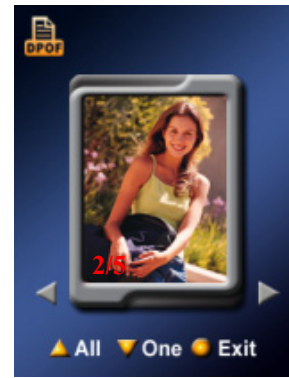
Operation	Display Screen
<ol style="list-style-type: none">1. Use direction buttons to select the Slide option (📺).2. Press Enter button to start the slide show; Press it again to stop.	

◆ About DPOF

This camera supports DPOF (Digital Print Order Format). DPOF makes printing your pictures extremely easy. After the DPOF is created on the memory card, all of the selected pictures can be printed simply by inserting the memory card into the memory-card slot of any DPOF compatible printer.


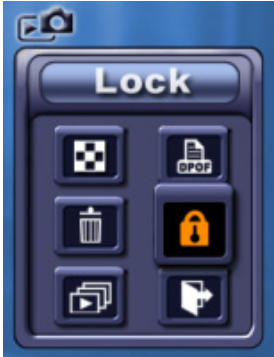
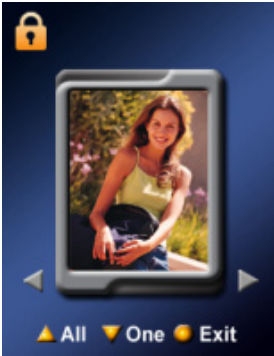
Operation	Display Screen
<ol style="list-style-type: none">1. Use direction buttons to select the DPOF option (📄).	

2. Press Enter button to go to the DPOF menu.
3. Use Right/Left buttons to select the picture.
4. Use Up button to set/cancel all DPOF pictures and Down button to set/cancel single DPOF picture.
5. Before a picture is set/cancel DPOF, a confirmation screen will appear; choosing "Yes" will execute the operation, "No" will cancel the operation.
6. Press Enter button to exit.



◆ **Lock Pictures**

Single or all pictures can be locked. This function can prevent the pictures from being deleted accidentally.

Operation	Display Screen
<ol style="list-style-type: none"> 1. Use direction buttons to select the Lock option (). 	
<ol style="list-style-type: none"> 2. Press Enter button to go to the Lock menu. 3. Use Right/Left buttons to select the picture. 4. Use Up button to lock/unlock all pictures and Down button to lock/unlock single picture. 5. Before a picture is locked/unlocked, a confirmation screen will appear; choosing "Yes" will execute the operation, "No" will cancel the operation. 6. Press Enter button to exit. 	

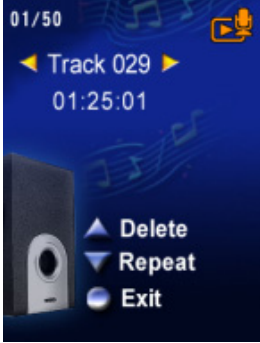
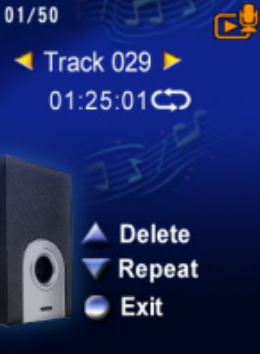

◆ Voice Playback

◆ Direction buttons Function

In Voice Playback Mode, the direction buttons have the following functions:

	<p>Right/ Left buttons : Select the last or next voice.</p> <p>Up/Down buttons : Adjust the voice playback volume.</p> <p>Enter button : Switch to voice option menu.</p>
--	--

Operation	Display Screen
<ol style="list-style-type: none"> 1. Use Up/Down buttons to select the Voice option. 2. Press Enter button to go to Voice Playback Mode. 	
<ol style="list-style-type: none"> 3. Use Right/Left buttons to go to the next or last voice recording. 4. Press Shutter button to start playing back the selected voice. Press it again to stop. 5. Use Up/Down buttons to adjust the volume. 6. Press Enter button to go to the voice playback option menu. 	

<p>7. Use Up button to select Delete option and Down button to select Repeat option.</p>	
<p>8. Press Up button once to repeat single voice; Press twice to repeat all voice recording.</p> <p>9. Press it again to disable the repeat function.</p> <p>10. The repeat icons will be different while selecting Repeat One option and Repeat All option.</p>	
<p>11. To delete a voice, use Right/Left buttons to select the voice.</p> <p>12. Use Up button to delete all voice recordings and Down button to delete single voice recording.</p> <p>13. Before a voice is deleted, a confirmation screen will appear; choosing "Yes" will execute the operation, "No" will cancel the operation.</p> <p>14. Press Enter button to exit.</p>	

Listening to MP3 Music

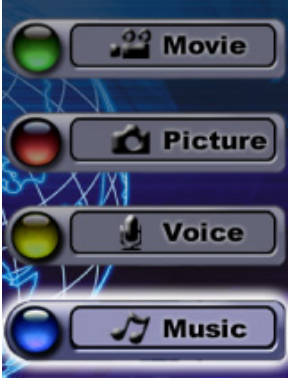
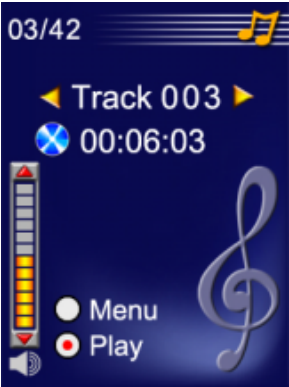
◆ MP3 Music

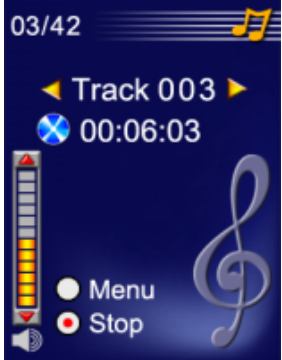
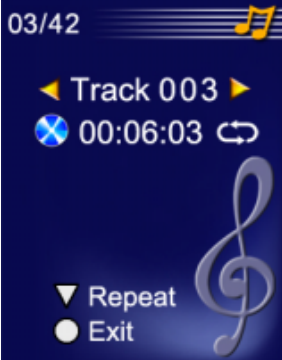
MP3 is a compressed audio file format. The MP3 music can be downloaded from some MP3 web sites.

◆ Transfer MP3 Music to the camera

1. Install the camera driver on your computer.
2. Connect your camera to the computer USB port.
3. The Red LED will light when the camera is connected to the computer and in Mass Storage Mode.
4. Transfer MP3 music to the MP3 folder.
5. Once all the music is transferred, disconnect the USB cable from the PC.

◆ Listen to MP3 Music

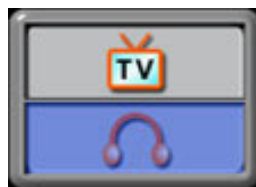
Operation	Display Screen
<p>1. In Playback Mode, use Up/Down buttons to select the Music option</p>	
<p>2. Use Right/Left buttons to select MP3 you want to play.</p>	

<ol style="list-style-type: none"> 3. Press shutter button to play MP3 4. Press shutter button again to stop playing. 5. Press Up/Down buttons to adjust volume. 	
<ol style="list-style-type: none"> 6. Press Enter button to go to repeat menu. 7. Press Down button once to repeat current MP3(↶↷). 8. Press Down button twice to repeat all MP3(↶↷↶↷). 9. Press Enter button to exit. 	

◆ Listen to MP3 Music with earphone

MP3 stored in the camera can be played either by built-in speaker, or Earphone, or TV.

When the earphone cable is plugged in the camera, the option menu of Earphone/TV pops out on the LCD Screen. Choose earphone or TV and press Enter button to validate the setting.



Viewing MPEG4 Movie on PC

◆ MPEG4 Movie

MPEG4, the multimedia format and compression standards, is a cutting-edge compression technology developed by MPEG (Motion Picture Expert Group). It not only enhances the image quality but also improves the efficiency of recording capacity.

MPEG4 is adopted in this camera to take DVD-quality MPEG4 movies. The MPEG4 movie format of AVI is used in this camera.

◆ View MPEG4 Movie on PC

When playing an MPEG4 movie for the first time, MPEG4 Video Codec Xvid should be installed in PC. To do this:

- (1) Insert the CD-ROM into the computer's CD-ROM drive. Click "Install Device Driver" (Install MPEG4 Video Codec Xvid) and follow the on-screen instructions to complete the installation.
- (2) Start video player such as Widows Media Player to view MPEG4 AVI Movies.

◆ Share MPEG4 Movie


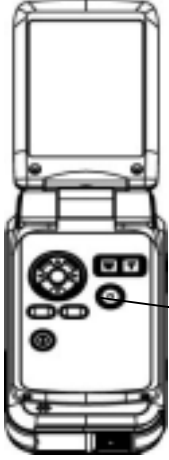
You can share the recorded MPEG4 movies to your friends via internet or CD. Make sure MPEG4 Video Codec Xvid is installed in your friends' PC. MPEG4 Video Codec Xvid is available in the provided CD or can be downloaded from Internet.

◆ Correctly Viewing Portraits on your PC

Your camera with two-shutter design is convenient for taking landscapes and portraits. Press shutter on the side to take a Landscape (Figure1) or the shutter on the front to take a Portrait (Figure 2).

The default image output of the camera is Landscape Mode.

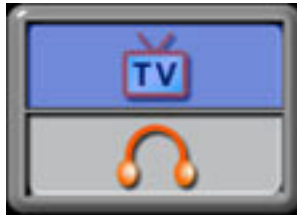
Before viewing portraits taken by the camera correctly on PC, rotate them in 90 degree to the right or left with Ulead VideoStudio 7.0. Refer to section 8 for the operation of image rotation.

Landscape	Portraits
 <p data-bbox="794 365 887 389">Shutter</p>	 <p data-bbox="1246 607 1339 631">Shutter</p>
<p data-bbox="518 837 611 862">Figure1</p>	<p data-bbox="1107 837 1200 862">Figure 2</p>

Viewing Pictures and Movies on a TV

You can view stored movies and pictures on a television. To connect to a television:

1. Connect one end of the AV cable to your camera's AV Out port.
2. Connect the other end of the cable to a television.
3. The option menu of Earphone/TV pops out on the LCD Screen.



4. Choose TV option and press Enter button to validate the setting.
5. The steps for viewing stored pictures and movie on a TV are exactly the same as for viewing them on the LCD monitor.



Note

The LCD monitor does not work when the camera is connected to a television.

Transferring Data to a Computer

◆ Installing the Digital Camera Driver

Before connecting this camera to a computer for the first time, you should install a driver on the computer. The driver is on the CD-ROM disc provided in the package. To install the driver:

1. Insert the CD-ROM into the computer's CD-ROM drive. The autorun screen will appear.
2. Click "Install Device Driver". Follow the on-screen instructions to complete the installation. Depending on your operating system, you may have to restart your computer after installing the driver.

◆ Connecting Your Camera to a Computer

You can transfer pictures, movies or voice recordings stored on your camera to a computer and send them in emails to friends or post them on websites. To do this you should:

1. Install the camera driver on your computer.
2. Connect the computer and camera with the supplied mini USB 2.0 cable.
3. Default mode is Mass Storage Mode when the camera connects to PC
4. Transfer pictures or movies or MP3 or voice recordings

◆ Mass Storage Device Mode

The RED LED will light up when the camera is connected to the computer. Movies, pictures and voice recordings can be found on your computer at "My Computer\Removable Disk\DCIM". Under this mode, you can read, delete, move, or copy any movie/picture/voice recording you want. Use the bundled Ulead application software to edit the movies or pictures.

◆ PC Camera Mode

When in Mass Storage Device Mode, press MODE button to switch to PC Camera Mode and the GREEN LED will light up. Under this mode, you can implement live video conference meetings or use video email over the Internet.

◆ Installing Bundled Software

The CD-ROM supplied with this camera contains five pieces of software.

- ⇒ **Ulead VideoStudio 7.0** is a user-friendly application that helps you read, edit and organize images.
- ⇒ **Ulead Photo Express 4.0** allows you to edit movies and is equally easy to use.
- ⇒ **Ulead Cool 360** is a Picture Panorama Editor that can create 360° and Wide-angle picture panoramas
- ⇒ **Acrobat Reader** is a popular program that you need to have installed to read the User's Manual. Many computer users will find they already have this software installed on their computer.
- ⇒ **MPEG4 Video Codec Xvid**, this decode software has to be installed for correctly viewing the movies you record.

The detail information can be found in online help of all the bundled software.

To install the bundled software :

1. Insert the CD-ROM into your computer's CD-ROM drive. The autorun screen appears.
2. Select the piece(s) of software you want to install from the list, then click "Install Application Software". Follow the on-screen instructions to complete the installation.

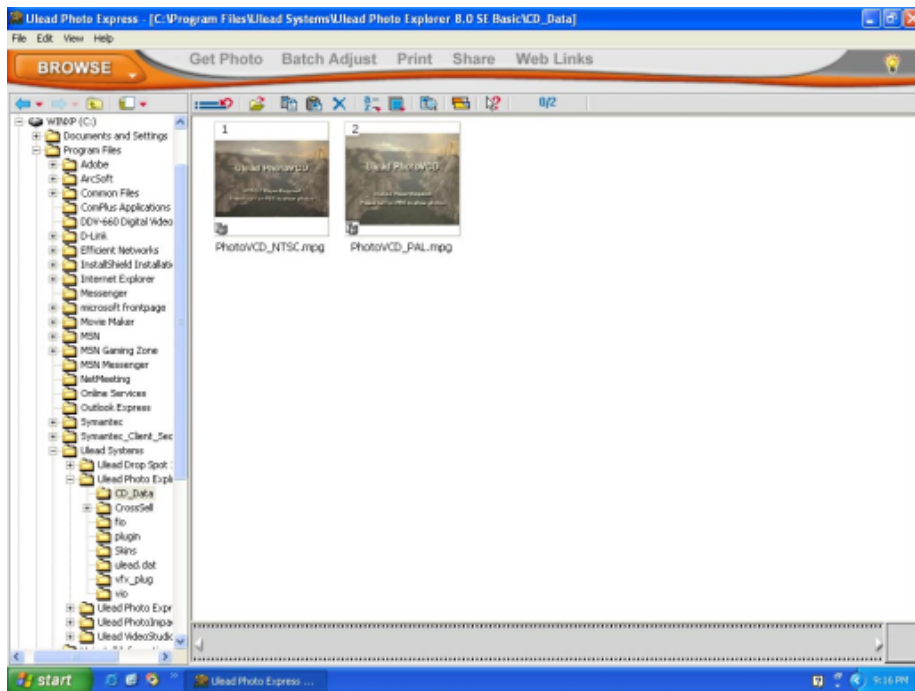
◆ Getting Started With Photo Express 4.0

- Click Start→ Select Programs→ Photo Express 4.0
- Photo Express 4.0 main Screen will appear on your desktop.

Viewing Images stored in the Camera through Photo Express 4.0


To view images stored in the camera, you must switch to Mass Storage Device Mode.

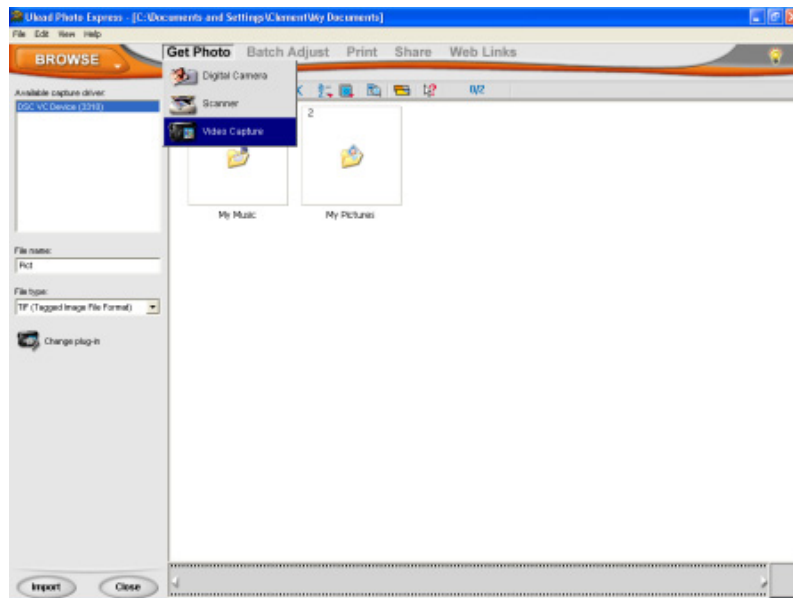
1. Select the image you want to open in the workspace from the browse bar on the left hand side.
2. Double click selected picture.



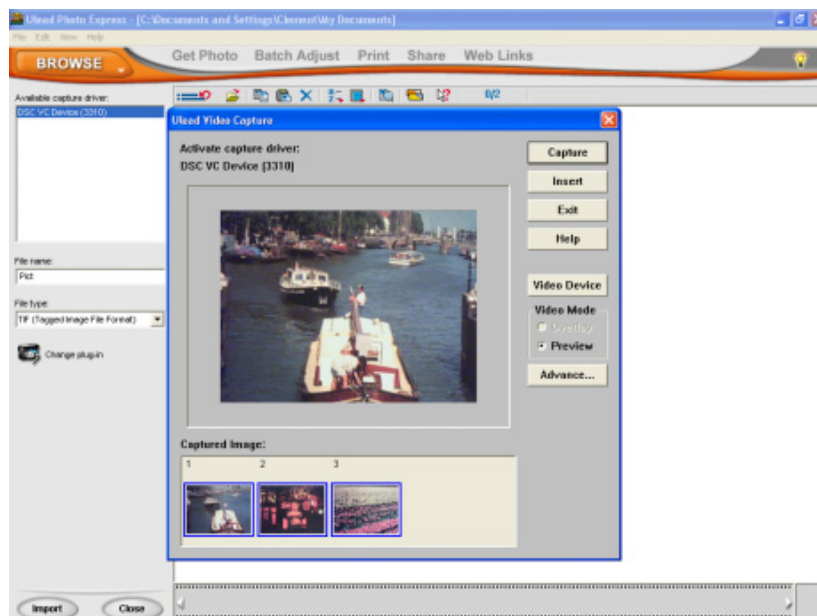
Capturing Camera Images through Photo Express 4.0

Before capturing a picture or video from the camera to the Photo Express 4.0 main screen, you must switch to PC Camera Mode. Press MODE button to Switch to PC Camera Mode. Under this mode, you can capture videos or pictures through Photo Express 4.0:

- * Click the **[Get Photo]**  button.
- * Click the **[Import]** button.

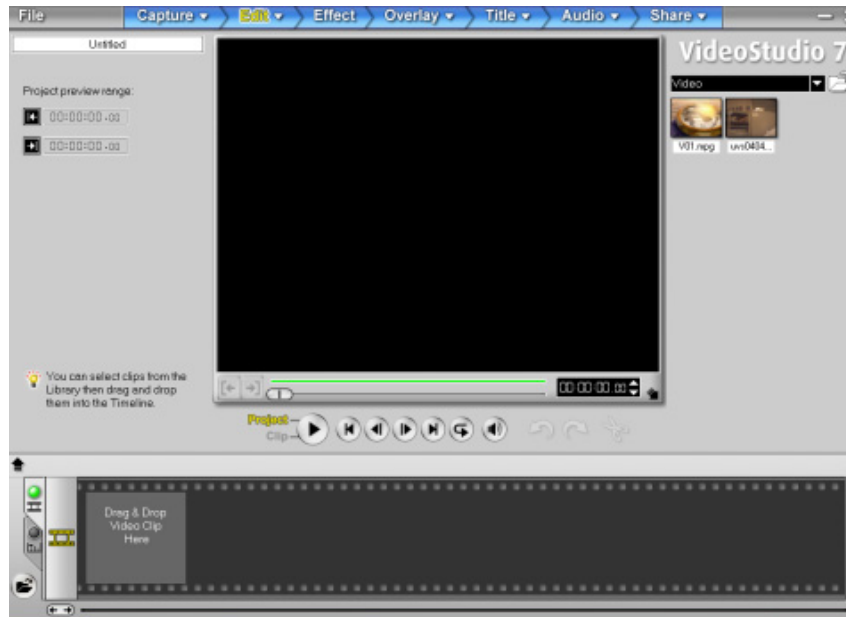


- * Click the **[Capture]** button, and then choose your images.
- * Click the **[Insert]** button, and click **[Exit]** button to leave the screen.



◆ Getting Started With Video Studio 7.0

- Click Start→ Select Programs→ Video Studio 7.0
- The Video Studio main Screen will appear on your desktop.

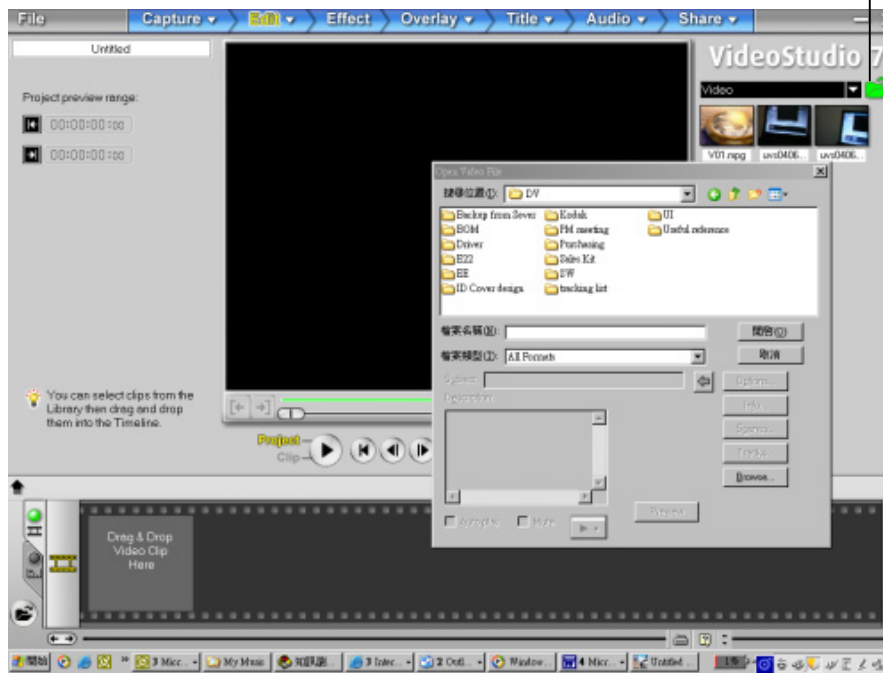


Viewing Images stored in the Camera through Video Studio 7.0

To view images stored in the camera, you must switch to Mass Storage Device Mode.

1. Click the folder on the right hand side of the screen.
2. Select the image stored in the camera and press Open button to view.




Folder



Capturing Video through Video Studio 7.0

Press MODE button to switch to PC Camera Mode. Under this mode, you can view camera video through Video Studio:

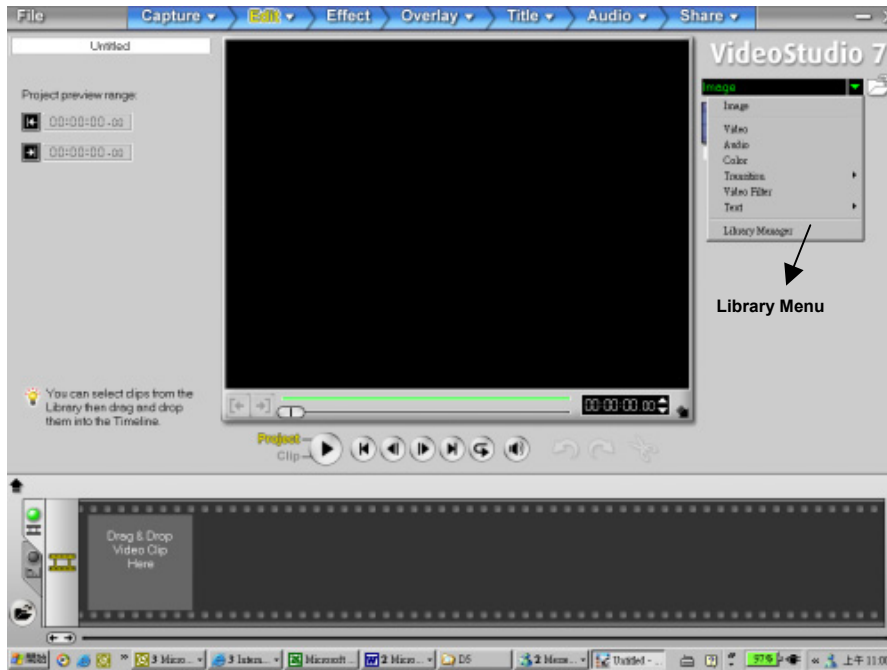
To capture a video/picture from the camera:


- * Click the Capture  item.
- * Click the [Capture Video ] button.
- * Click the [Capture Image ] button.

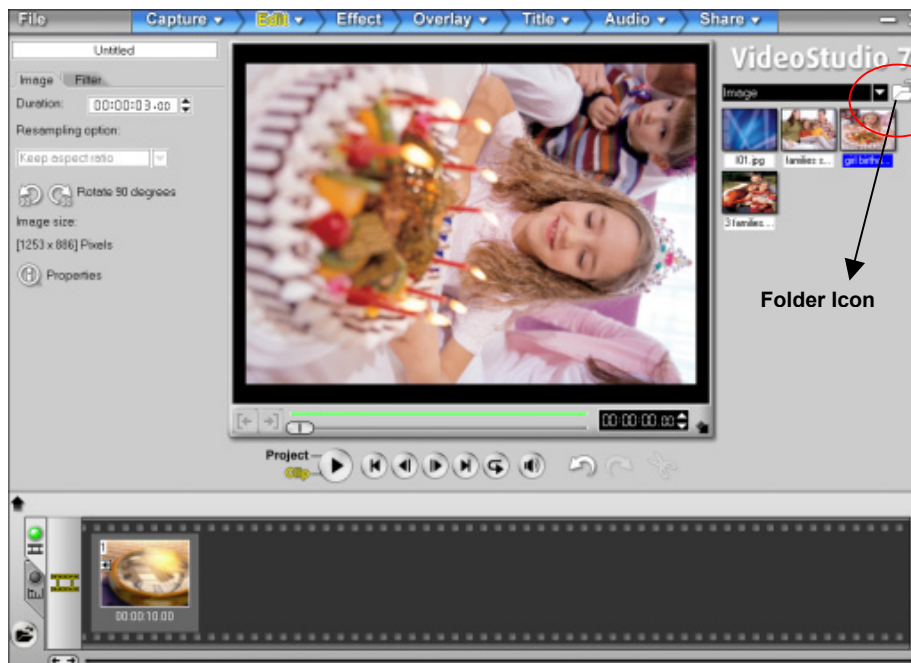



Rotating Picture through Video Studio 7.0

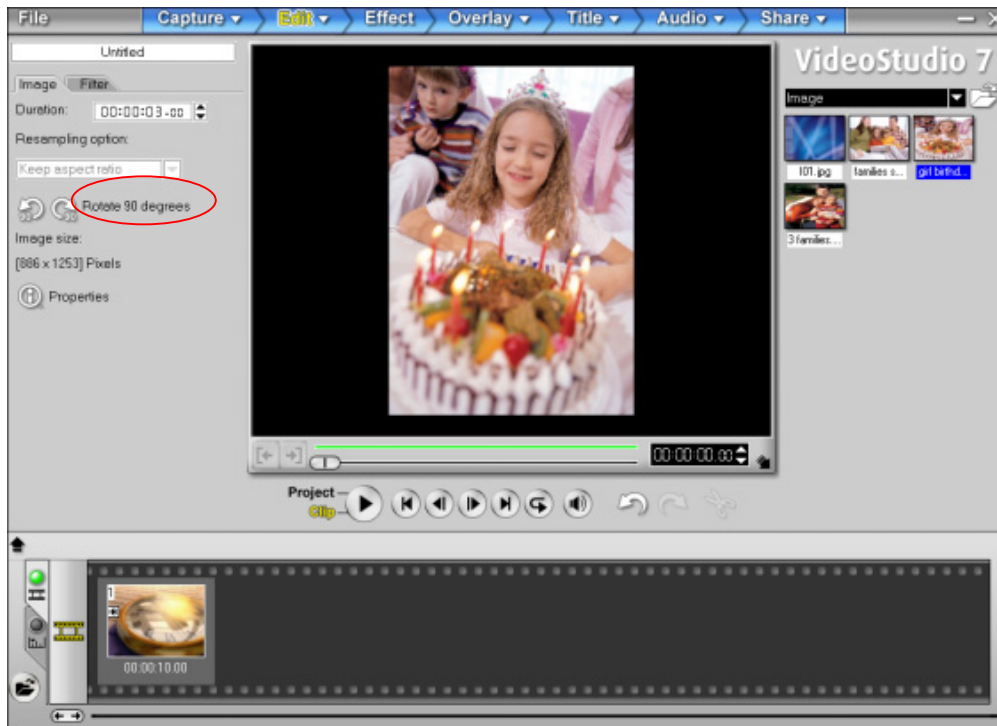
(1) Select "Image" from Library menu



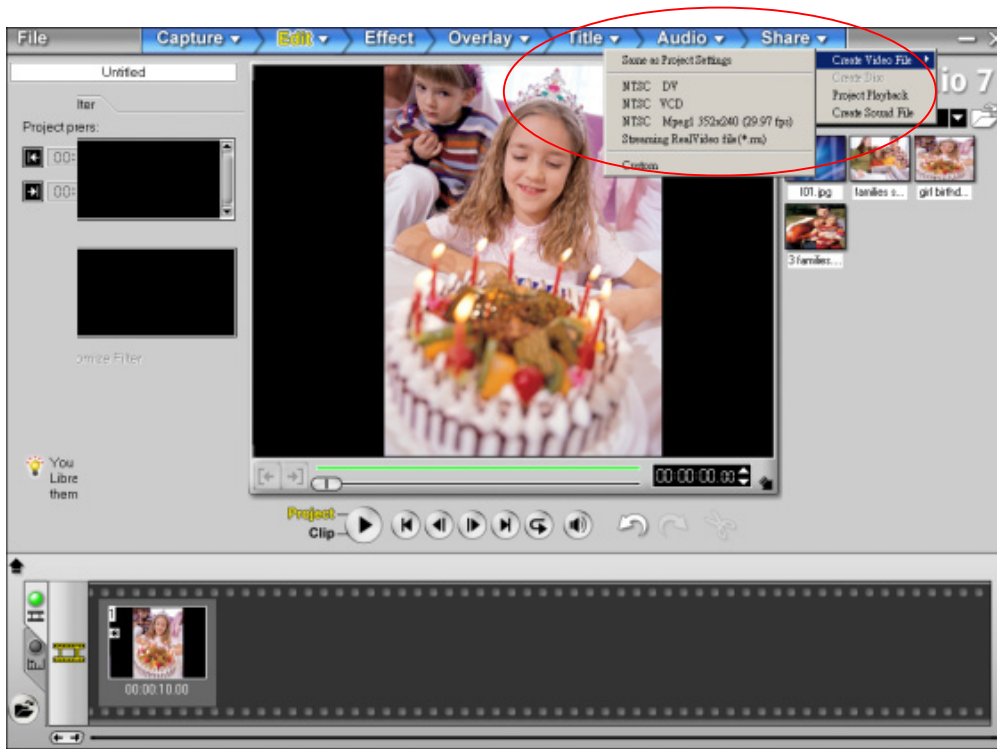
(2) Click Folder Icon  on the right side of the screen to load an image



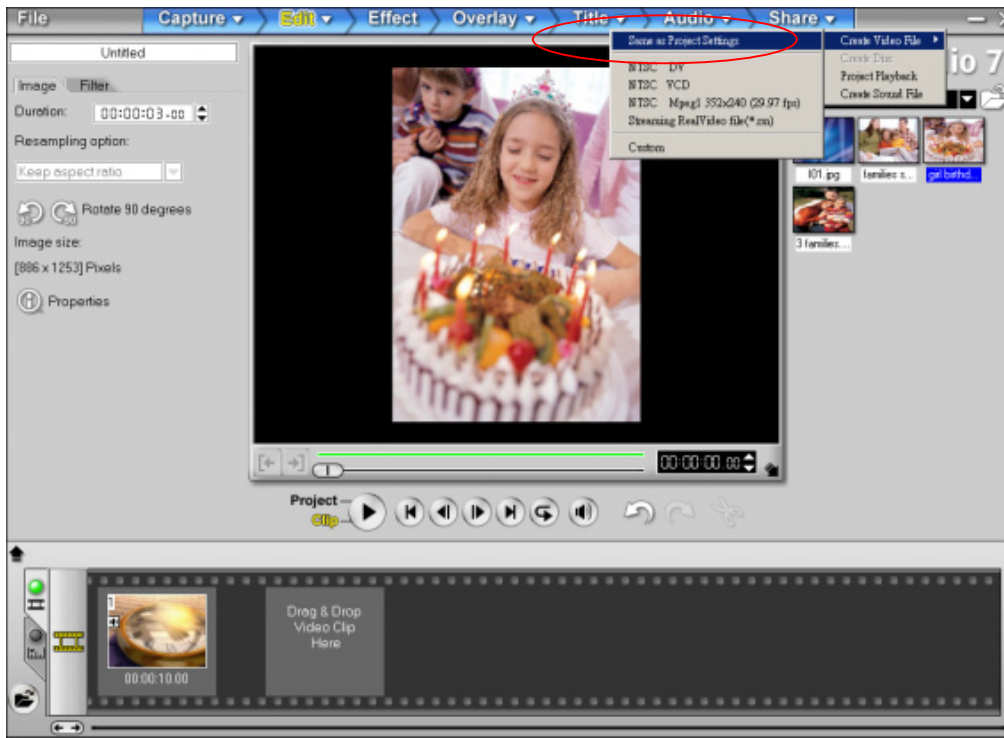
(3) Click <Rotate 90 Degrees Icon>  on the left side of the screen to rotate the picture.



(4) Click Share Menu  then select Create Video File.

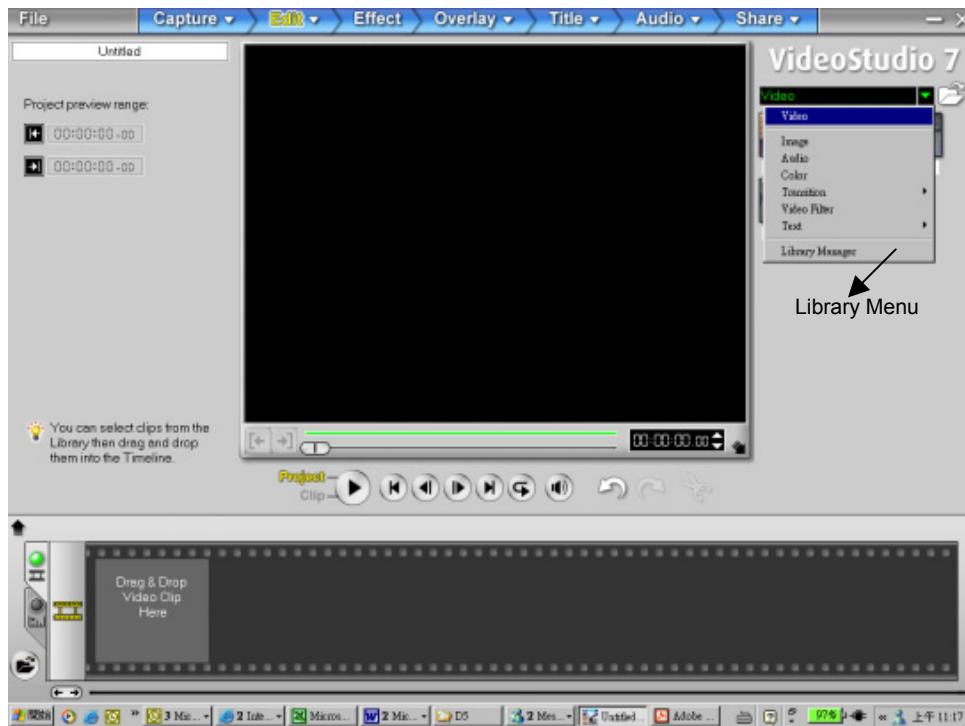



(5) Select <Same as Project Name> to save the image immediately.

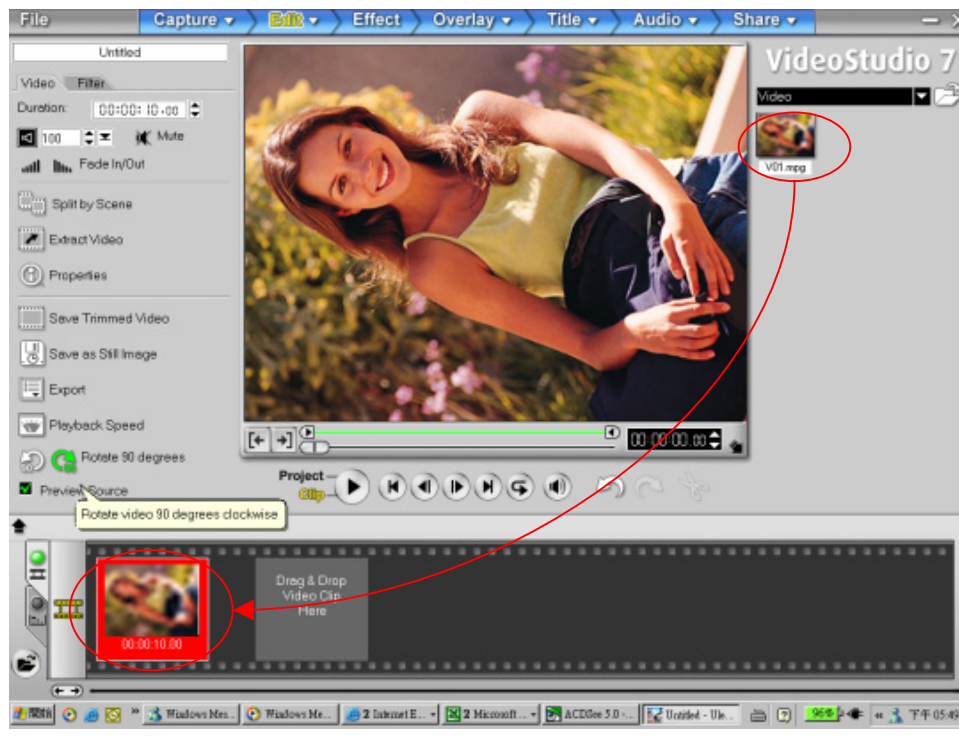



Rotating Video through Video Studio 7.0

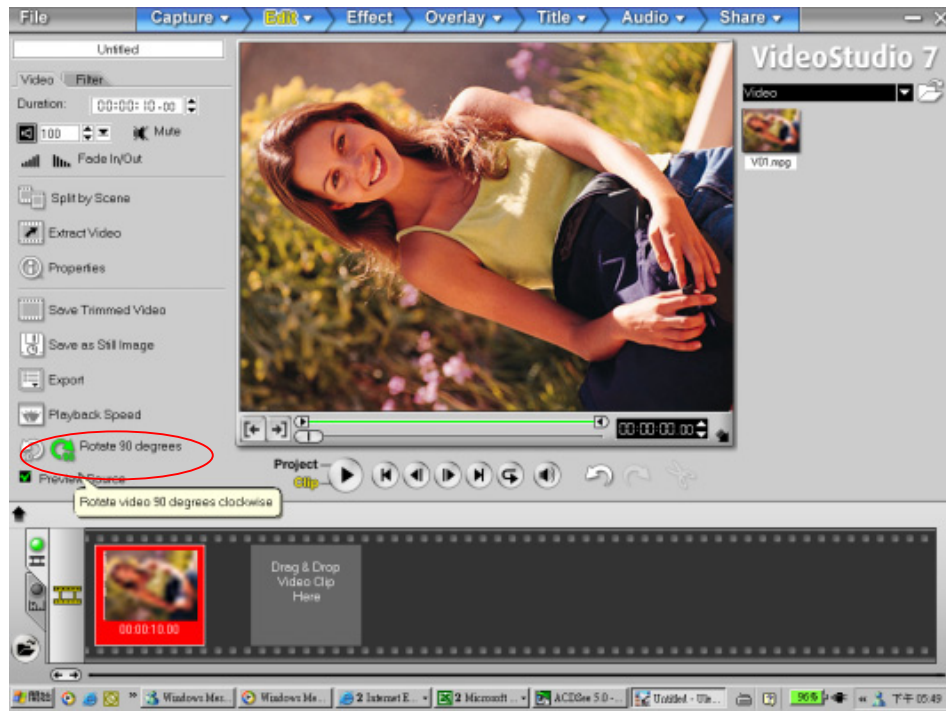
- (1) Select "Video" from Library menu



- (2) Click Folder Icon  on the right side of the screen to load a video clip, then drag and drop the clip into the Storyboard below.



(3) Click <Rotate 90 Degrees Icon>  on the left side of the screen to rotate the video.



Specifications and System Requirements

◆ Specification

Image Sensor	3.2 Mega Pixel Sensor
Operation Modes	Movie Record, Picture Record, Voice Record, MP3 Player, PC Camera, Mass Storage Device
Lens	f=8.54mm F3.0
Focus Range	Normal: 100cm ~ Infinity; Portrait: 60cm ~ 100cm; Macro: center 20cm
Digital Zoom	8X
Shutter	Electronical
LCD monitor	2.0" LTPS TFT LCD
Storage Media	Built-in 16M Memory; SD/MMC Card Slot Support, can be expanded up to 512MB
Image Resolution	2976x2232 ; 2048x1536 ; 1024x768
Movie Resolution	VGA 640x480 / QVGA 320X240, 30 fps
White Balance	Auto/Manual (Daylight, Fluorescent, Tungsten)
Exposure	Auto/Manual
Self-Timer	10 second delay
Flash	Auto/Off
File Format	Picture: JPEG Movie: AVI Voice:WAV
Image play	Single Image/Thumbnails/Slideshow
PC Interface	Mini USB 2.0 Port
TV out	NTSC/PAL Selectable
Battery	NP 60 Rechargeable Li-ion Battery
Dimension	95*57*30mm
Weight	113 without battery

◆ System Requirement

Windows 98SE/2000/ME/XP

Pentium MMX Celeron or AMD Athlon® CPU

64MB RAM

CD ROM

500MB free HDD space

Available USB port

16-bit Color Display